THE IRON AGE SEMI-ANNUAL INDEX

JULY-DECEMBER 1946, Vol. 158

100 East 42nd Street, New York 17, N. Y.

Illustrated Articles Indicated by *

Ace Co.: Electric Blowers*, Aug 22 p 70

Acet-A-Tip Co.: Air Acetylene Tips*, Oct 24 p 67

Acid Open Hearth Research Assn.: Elects New Officers, Nov 21 p 158 Gives Total Output for 1945; July 11 p 76

Acoustor Co.:
Acoustic Control Unit, Aug 22
p 70

Acromark Co.: Marking Attachment*, July 25 p

Adel Precision Products Corp.: Induction Soldering Speeds Up Kitchen Utensil Output, Sept 26 p 169

Aget-Detroit Co.: Dust Collector*, Oct 10 p 78

Air Conditioning: Air Conditioned Automobiles Pre-dicted, Nov 7 p 156; Nov 28 p

Air Reduction Sales Co.: Buys Air Reduction Plant, Aug 1 p 150

Aircraft:

ircraft:
Case for 100 Pct X Ray Inspection of Aircraft Castings*, Oct 10 p 56
Centrifuge, World's Largest, Planned by Navy for Supersonic Study, Oct 3 p 120
Czechoslovakia Nationalizes Production, Repair, Aug 1, p 86
Electric Catapult Launches Navy Planes, Sept 12 p 140
Engineering Service Offered Smaller Plants in Detroit Area, Aug 15 p 72
German Methods for Refining Aluminum Airplane Scrap, Oct 17 p 54

p 54
Indiana Group Gets Bid for Surplus, Sept 5 p 74
Industry Increasingly Productive Despite Materials Shortages, Aug 29 p 72
Metallurgical Development of Materials for Turbo-superchargers and Gas Turbines*, (2 Parts) July 25 p 40; Aug 1 p 60
Prefabricated Aluminum Houses May Be Built by Planemakers, Oct 17 p 109

Prefabricated Aluminum
May Be Built by Planemakers,
Oct 17 p 109
Pressure Welding Thin Aluminum
Parts*, Aug 8 p 56
Production of Ignition Radio
Shields*, Aug 29 p 56
Surplus Sale Attracts 104 Bidders,
Aug 22 p 150
Temper Embritlement of Aircraft
Steels*, Aug 29 p 51
Triple Alloy Structural Tubing
for Framework and Parts*, Aug
22 p 46
Get First Civilian

Triple Alloy Structural Tubing for Framework and Parts*, Aug 22 p 46
Turbochargers Get First Civilian
Use on Boeings, Aug 22 p 138
U. S. Surplus Infuses New Strength to Foreign Airlines, Nov 14 p 140
Upsetting Tubular Members Simplified by Special Grippers*, Aug 15 p 42

Aircraft Engine Research Laboratory: Fuel Studied With High Speed Camera, Dec 5 p 86

Aircraft Machinery Corp.: Bench Mill*, July 11 p 67

Aircraft-Marine Products, Inc.: Solderless Wire Connections*, Aug Solderless 1 p 70

Aireon Mfg. Corp.: Optical Micrometer*, Sept 5 p 70

Ajax-Electrothermic Corp.: Induction Furnace Heats 350 Slugs Per Hr*, Sept 12 p 55

Ajax Engineering Corp.: Electric Melting Furnace for Aluminum Alloys*, Sept 26 p 81

Alexander, H. L.: Advances in Sodium Hydride De-scaling Baths, Oct 10 p 75

Algonquin Parts, Inc.: Air Gun, Guardair*, Dec 12 p 82

Alien Property Custodian:
Order Alien Claims Filed, Sept 5
p 106

Alkyd Resins Industry Advisory Committee: Lack of Alkyd Resins Hampers Product Output, Nov 7 p 113

Allegheny Ludlum Steel Corp.: Earnings, First Quarter, July 4 p 121; Third Quarter, Oct 31 p 99

Allen-Bradley Co.: Solenoid Relay*, Oct 31 p 62 Solenoid Starter*, Oct 31 p 61

Allis-Chalmers Mfg. Co.:

Electronic Frequency Converter
for Melting Units*, Nov 7 p 57
Locomotive Gas Turbines to be
Built for Coal Group*, Sept 19

Built for Coal Group*, Sept 19 p 102
Practical Method of Selecting the Correct Type of Cast Iron*, (2 Parts) Oct 17 p 64; Oct 24 p 58
Practical Method of Specifying Cast Irons, Oct 31 p 46
Remote Indication System*, Aug 15 p 68

15 p 68 Sets Up Steam Turbine Studies, Aug 22 p 143 20-Million Volt Betatron for In-dustrial Radiography*, Nov 21

Workers Vote to Return, Oct 3

Alloy Casting Institute: Officers Elected at Annual Meeting, Aug 22 p 144

Alloy Steels:
Boron in Some Alloy Steels, Nov
28 p 64
Copper Alloy Steel Castings, July
11 p 57
Decontrol Raises Hopes of Carbon
Steelmakers for Price Rise, Nov
7 p 98

Steelmakers for Price Rise, Adv. 7 p 98
Decontrolled, Nov 7 p 98
Electronic Frequency Converter for Melting Units*, Nov 7 p 57
Induction Furnace Melting as Applied to the Manufacture of High Alloy Casting, Dec 19 p 67

Low Demand May Keep Prices
Down Despite Decontrol, Nov
7 p 99
Prices of High Tensile, Low Alloy
Steels, Aug 8 p 110
Production, Openhearth v. Electric,
1939-1946, Sept 5 p 104; Oct
31 p 99
Production v. Total Steel Output,
1939-1946, Sept 5 p 104; Oct
31 p 99
Properties of Various Alloys at

31 p 99 Properties of Various Alloys at Sub-Zero Temperatures, Nov 14

Requirements for High Temperature Service*, (2 Parts) Nov 7 p 46; Nov 14 p 92
Temper Brittleness in Alloy Steels*, Nov 28 p 56
Tinidur and Chromadur, German High Temperature Turbine Blade Steels, July 11 p 52
Triple Alloy Structural Tubing*, Aug 22 p 46
Warehouse Resellers of Products Given Price Advance, Aug 22 p 112
Wartime Applications Continue Ex-

Vartime Applications Continue Expanded Use, Dec 5 p 150

Alloys:
Electrons, Atoms, Metals and Alloys, Nov 28 p 64
Heavy Alloy, Tungsten Powder Product, Aids Machine Design*, Sept 19 p 62
High Temperature, for Gas Turbines, July 4 p 73
Light Alloy Controls Ended by British Government, Aug 15 p 114

Metallurgical Development of Ma-Metallurgical Development of Materials for Turbo-superchargers and Aircraft Gas Turbines*, (2 Parts) July 25 p 40; Aug 1 p 60 Molding Alloy, Trethaway Associates, Sept 26 p 81
New Heat Resistant Alloys Subject of Navy Research Program, Aug 22 p 95
Polarographic Analysis of Zinc in Aluminum Alloys*, Oct 3 p 36
Precision Casting Heat-Treatable Copper-Base Alloys*, Sept 19 p 48

48
Precision Forging of High Temperature Alloys*, Nov 28 p 42
Processing 4 Pct High-Purity Aluminum Alloy, Oct 31 p 45
Properties of Various Alloys at Sub-Zero Temperatures, Nov 14

Sub-Zero Temperatures, Nov 14 p 75
Selecting Nonferrous Bearing Material*, (2 Parts) Sept 5 p 54;
Sept 12 p 60
Silver Brazing Alloys, Handy & Harman, Oct 24 p 68
Tantung — What It Is, How to Use It*, Nov 14 p 76
Vacuum Melting in Germany*, Dec 12 p 64
Weldability of High Strength Wrought Aluminum, Nov 28 p 62

Alloys for High Temperature Service, by W. O. Binder*, (2 Parts) Nov 7 p 46; Nov 14 p 92

luminum:
Abrasive, 32 Alundum, Reduces
Grinding Costs*, Nov 21 p 56
Aging Heat Treatments of 75S
Aluminum Aug 15 p 49
Alodizing, New Surface Treatment*,
Dec 5 p 64
Aluminum Dross, Waste Product,
Found to Be a Source of Aluminum,
Aug 8 p 129
Bridge Span, First All-Aluminum,
Installed at Massena, N. Y., Oct
3 p 103

Installed at Massena, N. Y., Oct 3 p 103
Britain Plans to Expand Sheet Output, Dec 12 p 100
British Aircraft Firms Building 54,500 Houses, Oct 31 p 91
British Sales Involve Loss, Sept 5 p 86
Canadian Aluminum May Be Bought by U. S. for Housing Program, Nov 7 p 118
Canadian Price Increase Set, Sept 12 p 122
Capacity of Alcoa, Reynolds Metals, Kaiser, Oct 3 p 99, 122, 124
Casting Billets for Extruding*, Dec 26 p 52

Characteristics of Aluminum Bearings*, Sept 12 p 60 CPA to Offer U. S. Ingots, July 4 p 121

CPA to Offer U. S. Ingots, July
4 p 121
Cleaning Procedures*, Dec 19 p 76
Cressona Extrusion Plant Sold to
Alcoa, Sept 12 p 113
Current Sheet Deliveries, Capacity,
Production Rate, Oct 31 p 68
Deliveries Inadequate, Oct 3 p
106

106
Effect of Surface Scratches on Alclad Sheet, Oct 3 p 40
Effects of Temperature on Physical Properties of Alloy Sheets, July 4 p 75
Electrolytic Oxide Coating*, Sept 5 p 52
Electroplating Methods*, Sept 12 p

Electroplating Methods*, Sept 12 p
66
Films on Brazing and Welding
Added by Bureau of Mines, Dec
26 p 113
Finishing by Chemical Treatment*,
Aug 29 p 40
Flash Welder, Battery Powered*,
Dec 26 p 51
French Exports Below Prewar
Period, Aug 22 p 101
French Output Passes 1938 June
Rate, Aug 22 p 101
German Methods for Refining Aluminum Airplane Scrap, Oct 17

Houses Using Half Aluminum Sheet and Extrusions Seen, Oct 24 p 106
Housing Demands Cause Concern in Industry, Oct 31 p 68
How to Weld Aluminum*, (Parts 3, 4) July 4 p 67; July 11 p 53
In Critical Supply Despite War-Built Capacity, Aug 22 p 110
Ingot Prices Up, Aug 22 p 116
Italian Price Increase, Oct 3 p 106
Kaiser Buys Tagoma Love 179

Italian Frice Increase, Oct 3 p
106
Kaiser Buys Tacoma Ingot Plant,
Dec 5 p 132; Dec 12 p 96
Nail Tests Win Approval in Canada, Nov 21 p 120
Netherlands Output Resumed, Sept
12 p 158
Pallets Cut Material Handling
Cost*, Aug 8 p 66
Pig to Be Shipped From U. S.
German Zone, Nov 28 p 126
Plea Made for Lower Freight
Rates, Aug 22 p 80
Polarographic Analysis of Zinc in
Alloys*, Oct 3 p 36
Porcelain Ename! Coating, Aug 15
p 60

Porcelain Ename: Coangle Porcelain Ename: Coangle Pressure Welding Thin Parts*,

P 60
Pressure Welding Thin Parts*,
Aug 8 p 56
Prices of Ingot and Scrap Up,
July 18 p 116
Processing 4 Pct High-Purity Aluminum Alloy, Oct 31, p 45
Production Gets Under Way at
Permanente's Mead and Trentwood Plants, July 11 p 78
Production in U. S. Fell 36 Pct
in 1945, Sept 26 p 156
Removal of Japanese Plants Recommended, Nov 28 p 121
Soft Water Rinse Improves Finishes*, July 11 p 58
Spot Testing, Nov 28 p 68
Statistics for U. S., 1941-45, Sept
26 p 156
Statistics: World Production, 1945,
Sept 26 p 158
Surface Finishes*, (3 Parts), Aug
29 p 40; Sept 5 p 50; Sept 12
p 66
Troutdale Plant Starts Production,
Oct 10 p 92

Troutdale Plant Starts Production,

Troutdale Plant Starts Production, Oct 10 p 92 Tuyeres for Blast Furnace*, Oct 10 p 68 Weldability of High Strength Wrought Alloys, Nov 28 p 62 Window Priorities Sought for Vet Housing, Nov 21 p 124

Aluminum Cleaning Procedures, by J. S. Brady*, Dec 19 p 76

Aluminum Co. of America:
Cressona Plant Sale Approved by
Dept. of Justice, Sept 12 p 113
Gets WAA Nod on Cressona Plant
Sale, Aug 22 p 111
Girds for New Domestic and Future Canadian Competition with
Eye on Government*, Oct 3 p

Installs First All-Aluminum Bridge

Installs First All-Aluminum Bridge Span, Oct 3 p 103 Newark, O., Smelting and Casting Plant Purchased by Reynolds Metals, Dec 19 p 123 Plans to Build New Die Casting Plant, July 25 p 98 Wage Contract Extended, Dec 12 p 109

Aluminum Sheet and Extrusion In-dustry Advisory Committee: (See Civilian Production Admin-

American Brake Shoe Co.: Mechanical Pouring Unit Handles 11 Tons Per Hour*, Dec 5 p 77

American Broach & Machine Co.: Horizontal Broaching Machine*, July 4 p 78

American Can Co.: Indicted, July 4 p 114 Violation of Anti-trust Laws Charged by U. S., Sept 5 p 98

American Chemical Paint Co.: Alodizing, New Surface Treatment for Aluminum*, Dec 5 p 64 Phosphate Coating, Sept 19 p 68

American Chemical Society:

Atomic Power at Cost of Only 0.8
Cents a Kw-Hr Seen by Dr. C.
A. Thomas, Sept 26 p 137
Employment Clearing Houses for
Engineers Established, Oct 10 p
167
Scarcity of Scientists Threatening

Scarcity of Scientists Threatening Research, July 25 p 132

American Cladmetals Co.: Organized to Manufacture Cla Stainless Steel, July 18 p 112

American Electroplaters' Society:
Copper Stripping Methods, Sept
19 p 65
Examination of Electro-Cleaned
Steel by Electron Diffraction,
Oct 10 p 70
Metal Finishing Methods Discussed
at Pittsburgh Convention, Aug
8 p 68
Periodic Cleaner

8 p 68 Periodic Chart for Electroplaters, Nov 28 p 51 Purification of Rhodium Plating Baths, Sept 12 p 69

American Foundry Equipment Co.: Shot Peening in Strengthening Metal Parts*, (2 Parts) Nov 28 p 70; Dec 5 p 81 Wheelabrator Tumblast, Steel Cast-ings Cleaning Machine*, July 18 p 72

American Foundrymen's Assn.:
Advisory Group to Gray Iron Div.
Named, Aug 8 p 151
Appointments Made to Gray Iron
Division, Sept 5 p 74
Appoints Nine to Nominating Committee, Nov 7 p 105
Broad Study of Foundry Coke
Quality and Behavior Sponsored,
Dec 19, p 124
Chapter Officers Elected for 194647, Sept 12 p 150
Membership Gains 727 in Past
Year, Aug 22 p 148
Officers of Brass, Bronze Group
Elected, Nov 21 p 125
Personnel Committees Organized,
Nov 7 p 148
Washington Chapter Established
in Response to Petitions, Dec
19 p 92 American Foundrymen's Assn.:

American Gas Assn.:
Oven Makers Gave Heat Treaters
Thermal Flexibility, Says Gehnrich, Oct 24 p 108

American Gear Manufacturers' Assn.: Group Seeks Data on Simple Standards for Surface Quality, Nov 21 p 144

American Hydromath Co.: Inch Converter, July 25 p 66

American Industrial Radium and X-Ray Society: Officers Elected*, Nov 28 p 54

American Institute of Electrical Engineers: Pittsburgh Engineers Win AIEE Contest Awards, July 4 p 84

merican Institute of Mining and
Metallurgical Engineers:
Electric Furnace Steel Committee's
Fourth Annual Conference;
Quality Factors Weighed*, Dec
19 p 65
Metals Division Emphasizes Basic
Research Nov 28 p 64

Research, Nov 28 p 64

American Institute of Public Opinion: (See Gallup Polls)

American Institute of Steel Construc-

tion: Convention Discusses Deterrents to Maximum Efforts, Nov 7 p 110 Fabricated Industry Has Prosper-ous Future, Nov 7 p 80 Officers Elected, Nov 7 p 110

American Instrument Co.: Coating Thickness Gage, Dec 5 p

American Iron & Steel Institute:
Alloy Steel Production, Openhearth v. Electric, 1939 - 1946,
Sept 5 p 104; Oct 31 p 99
Employment, Hours and Wages in the Steel Industry, May, July 11 p 98; June, Aug 15 p 100; July, Sept 12 p 105; August, Oct 24 p 93; September, Nov 7 p 95; October, Dec 26 p 97
Finished Steel Capacity, Production and Shipments, May, July 18 p 111A; June, Aug 22 p 104; July, Sept 19 p 107; August, Oct 17 p 106; September, Nov 21 p 108; October, Dec 19 p 113
Ingots and Steel Castings, Aug.

Ingots and Steel Castings, Aug. 1945-May 1946, July 4 p 157 Ignots and Steel Castings Pro-

1945-May 1946, July 4 p 157
Ignots and Steel Castings Production, January 1901-August 1946, Oct 17 p 99
Ingots and Steel Castings Production, 1945, Jan.-June, July 18 p 111D; July, Aug 15 p 105; August, Sept 19 p 106; September, Oct 17 p 108; October, Nov 14 p 141; November, Dec 19 p 122
Metallurgists Hold Custody of Resources, Says Tower, Nov 28 p 118

p 118 Nail Shipments, September, Nov

Nail Shipments, September, Nov 28 p 107 Pig Iron Production and Capacity by Districts, May, July 4 p 115; June, Aug 1 p 106; July, Aug 29 p 94; August, Oct 3 p 103; September, Oct 31 p 93; Octo-ber, Nov 28 p 116 Standard Design for Light Gage Steel for Construction Announced, Nov 28 p 140

Standard Design for Light Gage Steel for Construction Announced, Nov 28 p 140

Steel Plant Maintenance Costs Up in 1945, Dec 5 p 115

Steel's Safety Record, 1945, Reveals Improvement, Sept 5 p 142

Summary of Production of Iron and Steel Products, 1941-45, Sept 5 p 106

Tin and Terneplate Shipments, Hot Dipped vs. Electrolytic, 1945, Jan-June 1946, Sept 5 p 98

Tower Predicts Steel Output Ample for Peak Motor C:1 Production in 1948, July 11 p 128

Typical 1942 Auto Used 3500 lb of Steel, Aug 22 p 74

Veterans on Steel Payrolls, July, Dec 12 p 109

American Locomotive Co.:
Diesel-Electrics Going into Mass
Production*, Sept 19 p 99
To Complete 75,000th Car, Aug 15 p 148

American Machine & Foundry Co.: Automatic Material Racks, Aug 8 p 75

American Machine & Gage Co.: Thread Gage Sets*, Sept 5 p 69 Thread Gages, July 25 p 64

American Machine & Metals, Inc.: Pressure Gages, Dec 19 p 83 Streamlined Gages, Aug 16 p 66

American Machine Tool Distributors' Assn.: WAA Actions Condemned; Reforms Asked, Sept 26 p 111,

American Management Assn.: Annual Reports Studied to Set Basis for Best Presentation, Nov 14 p 189

Basis for Best Presentation, Nov 14 p 189 Guaranteed Annual Wage Will Be New Labor Battleery, Declares Snider, Nov 7 p 134 Report for 1945-46 Stresses Hu-man Relations as Prime Respon-sibility in Industry, Sept 19 p 153

American Measuring Instruments Corp.: Vernier Calipers, July 25 p 65

American MonoRail Co.: Close Clearance Grab, Aug 8 p 76

American Optical Co.: Phase Microscope, Dec 19 p 83 Welding Goggle, Oct 24 p 68 American Quebec Zinc Refiners, Ltd.: Refinery Planned at Arvida, Que..

Refinery Planned Dec 19 p 128

American Radiator & Standard Sani-tary Corp.: Housing Needs Alter Retrench-ment Program to One of Expan-sion, July 18 p 136

American Railways Car Institute: Report for 1945 Shows Drop in Freight Cars in Use, Sept 19 p

American Rolling Mill Co.: Earnings, Third Quarter, Nov 7 p 100

Expansion at Butler, Pa., Oct 31 p 98

p 98
Plans \$69 Million Expansion, July
18 p 162
River Boat Crews Reject CIONMU As Bargaining Agent, Oct
17 p 152

American Society for Metals:
Award for Advancement of Research Goes to Dr. Zimmerman,
Aug 22 p 149
Charters Atomic Bomb Group,
July 25 p 130
Congress Will Feature Salon Exhibit of Photomicrographs, Oct
24 p 130
Dr. Bain Wing Sauvent 1946

hibit of Photomicrographs, Oct 24 p 130
Dr. Bain Wins Sauveur 1946
Award, July 25 p 109
Quality Control and High Productivity Stressed at Congress; Officers Elected*, Nov 28 p 52
Top Rank Scientists to Speak in March at Western Metal Show, Nov 28 p 147
West Coast Show to Be Revived in Spring; Last Held 1941, Oct 10 p 150

American Society for Testing Materials: Committee on Quality Control of Materials Organized, Oct 10 p

158
Extruded Magnesium Tubing Specifications, Oct 31 p 55
Pneumatic Fatigue Testing Development Described at Meeting, Aug 15 p 134
Scans Wartime Developments With Eye to Postwar Era at Annual Meeting*, July 4 p 72

American Society of Mechanical

Engineers:
Conservation of Raw Material Reserves Is National Problem, Says Davidson, Dec 19 p 168
More Stringent College Training for Engineering Students Urged, Oct 10 p 146 Officers Elected, Oct 3 p 87

American Steel Wire Co.:

Fine Steel Wires to Aid HeavyDuty Tire Users Get More
Miles, Nov 14 p 104

American Welding & Mig. Co.: Eight Metals Welded in One Ring*, Nov 7 p 66

merican Welding Society:
Metallurgical Aspects Stressed at
Annual Meeting*, Nov 28 p 59
Officers Elected, Nov 28 p 53
Welding Failures Laid by Charlton to Improper Design, Nov 7 ton to

Anaconda Wire & Cable Co.:
Sycamore, Ill., Plant Sold to Diamond Wire & Cable Co., Sept mond W 26 p 126

Andrews Steel Co.:
Properties and Subsidiaries Acquired by Detrola Corp., Aug
15 p 100

Angle Computer Co.: Angle Computer*, July 25 p 65

Anker-Holth Mfg. Co.: Hydraulic Cylinders*, Aug 1 p 67

Anodizing: (See Cleaning and Finishing)

N

Aus

E

Aut

S

T

Aut

Anthony, John:

Brass Mill Production Establishing
New Peacetime Record*, Oct
31 p 89

Eastern Stainless Steel Lifts Output to 20 Pet of Sheet Market*,
Aug 15 p 98

Foreign Funds for Purchase of
American Steel Seen Unlimited,
July 11 p 95
New Abrasive Reduces Grinding
Costs*, Nov 21 p 56
New Surface Treatment for Aluminum*, Dec 5 p 64
Shipbreakers' Profit Hopes Dim
As Towing and Labor Costs
Skyrocket, Nov 14 p 138; Nov
21 p 126 21 p 126

21 p 126 Shipbreaking May Yield 12 to 15 Million Tons of Scrap, July 18 p 103 Steel P

p 103 Steel Producers Increase Steel and Iron Prices, Dec 12 p 111 Swedish Sponge Iron Powder Now Available at Lower Prices*, Sept 26 p 114

Antimony:
Control Seen After Expiration of CPA, Sept 26 p 126
Controls Off, Dec 5 p 132
Imports Curbed, Oct 17 p 109
Prices, Oct 10 p 126; Nov 14 p 146; Dec 26 p 118

Apblett, William R., Jr.: Weldability of High Strength Wrought Aluminum Alloys, Nov 28 p 62

Apollo Steel Co.: Leased to Syndicate of 12 Sheet Consumers, Nov 28 p 112 May Be Sold to Midwestern Group, Oct 10 p 114

Arcos Corp.: Cutting Stainless Steel With the Electric Arc*, Nov 14 p 96

Armour Research Foundation: Opens Electrical Lab, July 11 p X-Ray Diffraction as an Analyti-cal Tool*, Sept 19 p 55

Armstrong, H. H., and Schlitt, F. F.: New Method of Coil Annealing, Oct 10 p 72

Army Air Forces: Has Difficult Job in Surplus Dis-posal, Aug 1 p 112

Army and Navy Munitions Board: Industrial Mobilization Plans Be-ing Worked Out. Sept 19 p 74; Nov 14 p 106; Dec 12 p 92 Munitions May Now Issue HH Ratings, Oct 31 p 98

Army Transportation Assn.: Military Transport of the Future, Nov 21 p 112

Aro Equipment Corp.:
Gear-Type Hydraulic Pump*, Oct
10 p 77 Pneumatic Drill*, Nov 7 p 68

Arthur, J. B.: Effects of Moisture in Electrode Coatings, Sept 19 p 58

Asco Corp.: Expanding Arbor, Auto-Arb*, Dec 26 p 71

Associated Research, Inc.: Resistance Meter*, Oct 17 p 73

Assn. of Iron and Steel Engineers:
Hot Stretch-Reducing of Seamless
Pipe at National Tube Plant,
Dec 5 p 155
Operating Problems Examined at
Convention*, Oct 10 p 71
Power Factory Input in Electric
Furnace Melting, Oct 17 p 63
Refractory Economy v. Combustion, Nov 21 p 64

Atomic Energy:
Atomic Power at Cost of Only
0.8 Cents a Kw-Hr Seen by Dr.
C. A. Thomas, Sept 26 p 137
British Expert Planning New Machine for Nuclear Research, Nov

Ac-Aug

5

p 67 (3

hing Oct Out-cet*,

of ited,

ding

Alu-Dim losts Nov

o 15 y 18

Steel

111 Now ces*,

n of

9 14 p

ngth Nov

Sheet

roup,

the

11 p

alyti-

F.:

aling,

Dis-

Be-p 74;

нн

uture.

, Oct 68

ctrode

, Dec

73

neers: Plant,

ed at

lectric p 63 p 63 mbus-

British Expert Planning New Machine for Nuclear Research, Nov 14 p 201
British Views on Atomic Plan, July 4 p 117
Cosmic Ray Mesons Discussed by Scientists, Oct 10 p 137
Fission at Bikini*, July 18 p 50 GE to Operate Lab in Schenectady, Nov 14 p 131
New Atom Smasher, Sept 19 p 145
Research Program in Advanced Nuclear Physics Inaugurated at Clinton Laboratories, Oct 17 p 156

156 ools and Dies Must Keep Pace With Atomic Development, Says Prown, Nov 7 p 82 Vestinghouse Sends Nine to Nu-clear Institute, Aug 8 p 132

Austin, C. R.: Test Bar Data v. Casting Proper-ties, Sept 7 p 70

Austin, J. B.;

Becomes Director of U. S. Steel's

Research Lab., Nov 7 p 114

Effect of Changes in Condition of
Carbides on Some Properties of
Steel, Nov 28 p 54

Austin Co.: Welded Trust Stresses Tested with Strain Gages*, July 25 p 45

Australia: Tantalite Developed for Radar Still Vital to Industry, Aug 22 p 134

Automatic Temperature Control Co.: Electronic Relay*, Oct 31 p 62

Automatic Transportation Co.:
Commutator Head, Aug 8 p 73
Hand Truck, Aug 8 p 74
Industrial Truck Handles 30-Ton
Load*, Dec 5 p 80
Selenium Battery Charger*, Dec
12 p 81
Tiering and Clamp Trucks*, Nov
14 p 99

Automobile Manufacturers Assn.:
Clifton Award Presented to Alvan
Macauley, July 4 p 114
Names Coyle Director; Other Officers Elected, July 4 p 114
Passenger Car 9-Month Loss Reported, Dec 19 p 150
Replacement Parts Output Double
1941 Rate, Dec 12 p 121

Automotive Industry:
Air Conditioned Cars to Be Designed by Engineers, Nov 7 p
156; Nov 28 p 159
All-Welded Automobile*, Sept 12

All-Weided Automobile', Sept 12 p 82
Auto Parts Price Increased, Aug 22 p 102
Automakers Lose, First Half 1946, Sept 5 p 72
Automatic Broaching Speeds Parts Output*, Oct 10 p 66
Back Wages Suit Against Continental Motors, July 18 p 80
Belgian Auto Output Hampered by Lack of Items at Big Plants, July 4 p 140
Bobbi Motor Car Corp. Withdraws Application to Issue Stock; Moves to Birmingham, Sept 12 p 92
Briggs Introduces Laminated Plassing

British Automobile Prices Ingritish Automobile Prices Increased, July 25 p 70
British Companies Decry Sheet
Steel Cut, Oct 31 p 101
British Nations Hold Auto Golden
Jubilee, Aug 15 p 126
British Production and Exports of
Private Cars, August, September,
Nov 7 p 95
British Steel Sheet Shortage Worries Auto Exporters, Nov 28 p
96

96
Buick Modernizes Cylinder Bore
Production*, Nov 21 p 65
Buick Output Higher in September, Oct 24 p 105
Canada Raises Price Ceilings, Dec 26 p 104
Ceilings Removed from Most Heavy
Trucks and All Motorcycles, Oct 10 p 105

Chevrolet Light Car Project Receives Washington Approval, Aug 29 p 130 Chevrolet Says Public Wrong About New Car Sales, Oct 31 p 66

Chrysler to Discuss Wage In-crease With UAW-CIO, Sept

Chrysler crease With UAV.

12 p 155

Coal Strike May Stop Some Motor Producers This Week, Dec 5 p 92

Cost-of-Living Wage Rise Discussed With Union Heads, Cost-of-Living wage cussed With Union Heads, Aug 15 p 70 Czechs Nationalize Production, Repair, Aug 1 p 86 Darrin Car to Be Produced at Grand Rapids, Mich.*, Aug 8

p 88
Detroit Employment Hits Peacetime High*, Sept 5 p 72
Detroit Has 51,000 Idle Because
Two Employees Are Fired, Sept

Detroit Has 51,000 Idle Because
Two Employees Are Fired, Sept
26 p 86
Detroit Prepared to Continue Car
Output, Dee 12 p 86
Developments in Commercial Vehicles Told at SAE Meeting,
Nov 7 p 146
Disposition of Parts; New WAA
Procedures, Oct 10 p 84
England Controls Auto Sales, Aug
8 p 92
Estimated Car and Truck Production, U.S. and Canada, 1941
and 1946, Aug 8 p 103
Executives List Reasons for Not
Attending Reuther Conference,
Aug 8 p 78
Exports From End of War Until
June, 1946, Dec 19 p 109
Fine Steel Wires to Aid HeavyDuty Tire Users Get More
Miles, Nov 14 p 104
Ford Cuts Production Schedules,
Nov 7 p 72
Ford Offers Blueprint for Sound
Labor-Management Policies But
Sees Little Chance for Guaranteed Annual Wage, Sept 26
p 84
Ford Openhearth Stoppage, Over

p 84 Ford Openhearth Stoppage, Over Sodium Fluoride Fumes, Costs 17,000 Tons of Steel, Oct 24 p

Forecasters Wait in Limbo for Auto Buying Pattern to Jell*, Aug 1 p 104

French Aluminum Midget Car*, Sept 26 p 98

French Exports and Imports First Half of 1946, Sept 12 p 138

French Protest Export of Cars to U.S., Sept 12 p 136

GM Cancels Its 1948 Die Program, Dec 12 p 86; Dec 19 p 88

p 886
GM Hits New Production Peak,
Dec 5 p 92
GM Holds Press Conference to
Explain Low Output, Sept 12

p \$2 GM Raises Car Prices by \$100 Across the Board, Nov 14 p 131 Great Lakes Strike May Have Serious Repercussions, Aug 22

Serious Repercussions, Aug 22
p 72
High Wage Rates Reflected in
Metal Processing, July 11 p 70
Incentive Pay and Uniform Wage
Pattern Involved in New
Strikes, July 11 p 70
Insulation Discussion Heard by
Engineers Group, Nov 14 p 176
Inventories Reach All-Time High,
Nov 14 p 102
Jessop Completes Test on Clad
Metal Bumpers and Other Accessories, Nov 28 p 157
Kaiser Gets Foreign Rights for
New Light Car, July 18 p 92
Kaiser-Frazer Autos Make Debut
Before Detroit Audience, Aug
8 p 112
Kaiser-Frazer to Grant Discount
on Cars to Employees, Dec 12
p 88
Kaiser-frazer Magnesium, Aluminum

on Cars to Employees, Dec 12 p 88
Kaiser's Magnesium, Aluminum
Passenger Bus-Trailer Practically Eliminates Steel, July 25 p 76
Lead Controls Threaten Output,
Mason Charges, Sept 19 p 84
Los Angeles to Become Detroit of the West, Nov 28 p 92
Losses \$1.5 Billion for First Half 1946, July 4 p 114
Machine for Drilling Holes in Automobile Frames, Snyder Tool and Engineering Co.*, Nov 28 p 77

Makers Get Full Share of Current Steel Output It Is Claimed, Oct 17 p 101
Motor Car and Truck Production, U.S. & Canada, 1941 and 1946, Aug 1 p 105
Motor Car Output Hits New High, July 18 p 78
Norris Stamping & Mig. Co. First Auto Wheel Plant to Operate on Coast. Aug 29 p 74
Output Climbs Despite Labor and Material Crises, Aug 8 p 103
Output Should Meet Demand in 2-Yr Time, Wilson States, Oct 17 p 148

Yr Time, Wussel Clark
p 148
Packard Assembly Line Lag Costs
\$2.5 Million, Aug 22 p 74
Packard \$20 Million Expansion
Program Includes Introduction
of New Truck Line, Nov 21

p 78 arts Business Zooms, Nov 7

Passenger Car and Truck Production, July, Aug p 102; 1946 (Estimate), Dec 19 p 88
Passenger Car Makers Report 9-Month Loss, Dec 19 p 150
Passenger Car Production, Oct 1945-June 1946, Aug 29 p 89
Patternmakers to Ask \$2.75 Per Hr Minimum Wage Scale, Dec 5 p 92

Hr Minimum Wage Scale, Dec 5 p 92 Payrolls Up, Nov 28 p 107 Personnel Is Top Heavy, Oct 17 p 78 Pictorial History Published by Eaton Mfg. Co., July 18 p 162 Plating Auto Hardware*, Sept 19 p 59

Pating Auto Hardware*, Sept 19
p 59
Polishing and Buffing Die Cast
Auto Hardware*, Sept 5 p 58
Price Advance Not Expected,
July 4 p 82
Price Boost Will Have No Immediate Effect on Car Sales,
Aug 22 p 72
Prices of Cars Can Be Adjusted
by Dealers, Oct 10 p 84
Pricing Formula Applicable to
Passenger Cars, Sept 26 p 86
Producers Develop Interesting but
Costly Expedients to Ease
Shortages, July 25 p 68
Producers Fighting Uphill Battle
Against Unbalanced Inventories,
Nov 28 p 84
Producers to Have Training Programs, Aug 1 p 72
Production, Jan. 1—Oct. 5, 1946
(Estimate), Oct 17 p 102
Production Cuts Being Considered
by Many Producers, Oct 17
p 76
Production of Cars on the Way
Un: Accessory Output Drop-

production cuts Being Considered by Many Producers, Oct 17 p 76
Production of Cars on the Way Up; Accessory Output Dropping Steadily, Oct 3 p 60
Production of Passenger Cars, by Producer, First Nine Months of 1946 and Comparison With 1941, Oct 24 p 72
Production Passes the Million Car Mark, Aug 29 p 64
Production Schedules Cut 11
Times, July 25 p 68
Prospect for Production in July Brighter*, July 4 p 82
Ratio of Persons Per Vehicle Is
4.5 in U.S., Oct 17 p 78
Registrations Low for First Six Months, Sept 12 p 144; July, August, Oct 17 p 78; August, Oct 24 p 72; September, Dec 5 p 94; October, Dec 26 p 136
Replacement Parts Output Double 1941 Rate, Dec 12 p 121
Replacement Parts Shortage Acute; Engine Parts Unobtainable*, Aug 1 p 72
Rolls-Royce Reports on Auto and Aircraft Work, Aug 15 p 132
Shortage of Parts Taxes Ingenuity of Automakers, Aug 29 p 89
Steel Ample for Peak Motor Car

genuity of Automakers, Aug 29 p. 89
Steel Ample for Peak Motor Car Production in 1946, Predicts Walter S. Tower, July 11 p. 128
Steel Available for Only 4 Million Cars in 1947, Sept 19 p. 70
Steel Is Only One of Many Shortages, Oct 17 p. 102
Steel Supplies Critically Short; Some Shutdowns in Sight, Nov. 28 p. 112

Some Shutdowns in Signt, Nov 28 p 112
Steel Use in Cars May Lag Far Behind Delivery of the Steel, Nov 28 p 84
Strikes Assigned as Reason for Low Level of Production, Aug 8 p 78
Strikes at Ford and Chrysler Pending, Aug 29 p 64

Strikes in Parts Industry, Oct 3

Surplus Parts Disposal Hits Rec-ord in Cleveland in August, Oct

ord in Clerkovian Color of the Color of the

Suripus Parts Sold, Nov 14 p 207
Swiss Receipts of U.S. Cars First
Half of 1946, Nov 7 p 95
Tire Output Climbing, July 4
p 84
Tire Shipments, Jan.-July, 1946,
Oct 3 p 62
Truck-Trailer Industry Will Exceed 60,000 Cars, Sept 12 p 158
Tucker Corp. Leases DodgeChicago Plant to Produce New
Auto, Sept 26 p 112
Tucker Corp. Plants Output of
Its New Car in 8 to 10
Months*, July 25 p 106
Tucker Corp. Rents Plant to
Build Motor Cars, July 11 p
102
Two-Element Balancing Machine
for Crankshafts Incorporates
Automatic Drill*, July 25 p 62
Typical 1942 Auto Used 3500 lb
of Steel, Aug 22 p 74
Union Seeking Industry Wage
Pattern in Chrysler Case, Oct
31 p 64
Unions and Management Have
Financial Pains, Aug 15 p 70
UAW-CIO Plans Indicate Determination to Hold Price Line,
July 18 p 110
Vets to Get Special Cars From
Oldsmobile, Oct 3 p 135
Wage Negotiations to Be Accompanied by Statistical Barrage,
Dec 26 p 74
Willys-Overland Introduces Lightweight, Low Cost Car*, Oct 10
p 82
Willys-Overland Introduces Lightweight, Low Cost Car*, Oct 10
P 82
Willys-Overland Jeep and Station
Wagon Production Oct 10

weight, Low Cost Car*, Oct 10 p 82
Willys-Overland Jeep and Station
Wagon Production, Oct 10 p 84
Willys Starts Delivery of Jeep
Station Wagon, Aug 1 p 74
Workers Start "Walking Time"
Suits Nov 28 p 116

B

Babcock & Wilcox Co.: Sperry Reflectoscope Checks Plate Quality for Welding*, Sept 12 p 64

Badger, W. L.:
Metallurgical Development of Materials for Turbosuperchargers and Aircraft Gas Turbines, (2 Parts), July 25 p 40; Aug 1

Bailey Meter Co.: Duplicating Attachment*, Aug 29 p 59 mperature Meter", Oct 17 p 71

Baker & Co., Inc.: Deoxo Indicator*, July 18 p 75

Baker Mfg. Co.: Flame Cutting and Welding in Bulldozer Manufacture*, Sept 12 p 56

Baldwin Locomotive Works:
Oscillator Permits Stepless Adjust-ment*, Nov 28 p 66
Sales for Year Total \$105 Million, Aug 1 p 82

Barber, Alfred A., Laboratories: High Frequency Probe*, July 25 p 66

Barium Steel & Forge, Inc.: Forging High-Alloy Rounds With V-Type Dies*, Aug 1 p 44

Barmasel, S. H.: Reproducing Drawings on Metal*, Nov 21 p 62

Barnaby Mfg. & Tool Co.: Knurling Tool*, Nov 7 p 69

Barnes, John S., Corp.: Hydraulic Pumping Units*, Aug 1 p 67

Barnes, Ralph M.: Industry Expands Use of Time Study, Aug 1 p 53

Barrett-Cravens Co.: Lift Truck*, Nov 14 p 99

Barringer, Edwin C.: Blasts OPA for Failure to Raise Steel Scrap Prices, Sept 19 p 104

Bars:
Bar-End Forge Furnace, Selas
Corp. of America*, Nov 21 p 74
Bending Machine, Klingelhofer
Machine Tool Co.*, Oct 3 p 57
Concrete Exports Exceed Prewar
Dates Nov 14 p 108

Machine Tool Co.*, Oct 3 p 57
Concrete Exports Exceed Prewar
Rates, Nov 14 p 108
Extras on Concrete Reinforcing
Bars Raised, Oct 10 p 111
Induction Heat Treated Cold-Finished Bars Now Made Available
by J&L, Dec 12 p 114
Inland Hi-Bond Reinforcing Bar
Output Licensed by U.S. Steel
Subsidiaries, Aug 22 p 113
Kaiser Increases Price by \$7 Net
Ton, Dec 26 p 104

Kaiser Increases Price by \$7 Net
Ton, Dec 26 p 104
Lack of Concrete Reinforcing Bars
Seen Threatening Construction
Plans, Sept 5 p 106
RFC Again Subsidizes Price of
Sheet Bars for Non-Integrated
Mills, Aug 22 p 104
Sheet Bar Subsidy Now Subject
of Speculation With Price Control Off, Now 14 p 130
Test Bar Data v. Casting Properties, Sept 26 p 70

Basing Points:

Cement Case Seen Weakening
FTC Stand on Steel Basing
Points, Oct 3 p 85
Cement Decision to Be Taken to
Supreme Court by FTC, Oct
10 p 86; Oct 31 p 98
Commerce Ballyhoos FTC Basing Point Policy, Aug 8 p 82
FTC Decision on Chain Institute
Case Expected by End of Year,
Aug 1 p 76
First Geneva Price Gives Little
Encouragement for "Cheaper
Steel," Oct 24 p 78
House Monopoly Group Temporarily Calls Off Hearings, Oct
17 p 110
Metal Lath Producers' System

17 p 110

Metal Lath Producers' System
Is Basis of Complaint, July 11

ls Basis of Company p 99 rice Established for Sheared Steel Plates, Oct 17 p 99 rice Established on Standard Structural Shapes, Nov 14 p 125

Batchelder, J. W.: Thread Rolling—Theory and Prac-tice*, (Parts 1, 2) Dec 19 p 58; Dec 26 p 55

Bay State Abrasive Products Co.: Cut-Off Wheels, Aug 29 p 62 Diamond Abrasive*, July 25 p 64

Beardsley & Piper Co.: Portable Mullor*, Sept 26 p 82

Bearings:
Aluminum Bearings Being Studied
by Automotive Engineers, July
11 p 70

by Automotive Engineers, July 11 p 70
Angular Contact, Miniature Precision Bearings, Oct 10 p 77
Characteristics of Aluminum Bearings*, Sept 12 p 60
Drill Holder Bushing, H. C. Clatifelter Co., Aug 22 p 68
Electroplated Engine Bearing Developed by Cleveland Graphite, July 11 p 126
Fatigue Testing, July 4 p 74
Law Suits Filed Against Bearing Makers, Aug 8 p 116
Lubricators, Gray Co., Inc.*, Oct 10 p 77

Lucite Models Solve Problems*, Aug 22 p 55 Moscow Exposition to Show Timken Bearings, Aug 29 p 105 OPA Raises Bushing Prices, Aug

OPA Raises Bushing Prices, Aug 15 p 110 Selecting Nonferrous Bearing Ma-terial*, (2 Parts) Sept 5 p 54; Sept 12 p 60 SKF Perfects Minute Precision Steel Balls, July 25 p 149 Synthetic Spinel Used by Germans, July 18 p 64 Tin Restrictions Removed in Bab-bitt Production, Oct 31 p 110

Beatty Machine & Mfg. Co.: Tube Testing Press*, Aug 15 p 67

Bee Chemical Co.: Brass Corrosion Preventive, Sept 19 p 68 Markets Drillyfe, New Drill Cool-ant, Aug 1 p 45

Behavior of 18-8 Ti-Stabilized Stain-less, by E. H. Wyche*, (2 Parts) Aug 8 p 61; Aug 15 p

Belgium:
Auto Output Hampered by Lack
of Items at Big Plants, July
4 p 140
Coal Compromise Made by France

Coal Compromise Made by France and Belgium, Oct 31 p 78 Machine Tool Industry Estimated Operating at 100 Pct, July 4

hoddy Consumer Goods Ex-ported from America, July 4 p 94 p 161 Shoddy

teel Industry, Sept 26 p 96 .K.-Belgian Groups Oppose Industrial Nationalization, Aug 15

Bell Aircraft Corp.: Will Buy Large Niagara Plant From WAA, Nov 7 p 113

Bellevue Industrial Furnace Co.: Batch Type Furnace*, Nov 21 p

Bellew, George E.: Flame Cutting Stainless Steel*, July 11 p 42

Benchmaster Mfg. Co.: Bench Punch Press*, Oct 3 p 55

Bennett, R.W., and Williams, R.D.: Flash Welding Steel Wire, Nov 28 p 62

Benton Co.: Optical Centering Tool*, Dec 26

Beryllium: regulum:
German Production Processes Report, Oct 10 p 169
German Production and Uses,
Aug 1 p 66
(See also Nonferrous Metals)

Bethlehem Axle Plant Modernized, by R. E. Penrod*, Oct 10 p

Bethlehem Pacific Coast Steel Corp. Steps Up Seattle Production, Oc. 24 p 80

Bethlehem Steel Co.:

Axle Plant at Johnstown, Pa.,

Modernized*, Oct 10 p 60

Earnings, Construction Plans, Dividends, Second Quarter, Aug

1 p 106; Third Quarter, Nov

7 p 100

Grace Favors Price Cut Instead

of Wage Rise if Facts Support

Move, Nov 7 p 100

Massive Forgings for Pulp Mill

Machinery*, Sept 26 p 69

OTC Approves Construction of

Power Plant at Sparrows Point,

Md., Dec 19 p 109

Three Slab Furnaces to be Designed by Rust, Aug 29 p 105

Binder, W. O.: Alloys for High Temperature Ser vice*, (2 Parts) Nov 7 p 46 Nov 14 p 92

Bituminous Coal Research, Inc.:
Holds Meeting; Reelects Directors, July 18 p 156
Locomotive Gas Turbines of 3750-hp Ordered, Sept 19 p 102

Blake, Edward, Co.: Tap Sharpener*, Nov 28 p 80 Thin-Body*, Chuck, Aug 29 p 61

Blaw-Knox Co.:
Buys Plant to Operate Under Its
Union Steel Castings Div., Oct

31 p 98 arnings, Third Quarter, Bolstered From Reserves, Nov 21 p 108 ire Control Nozzle, Oct 10 p

Machinery Demand to Continue, Says Witherow, Oct 3 p 135 17_1/2-Ton Clamshell Bucket for Transfer of Coal from Boats to Dock Storage*, Oct 10 p

Bliss, E. W., Co.: Material Strength Data for Tool and Die Designers, Nov 28 p lide Rule for Calculating Press Size*, Nov 28 p 69

Bobbi Motor Car Corp.: Application to Issue Stock With-drawn; Moves to Birmingham, Sept 12 p 92

Boeing Aircraft Co.: GE Turbochargers to Be Installed on Stratocruisers, Aug 22 p 138

Bokum Tool Co.: Tool Holder*, Dec 26 p 72

Hydro-Bomb, a New Underwater Rocket Weapon, Aug 22 p 146

ombs, Atomic: Fission at Bikini*, July 18 p 50

Book Reviews:
Arsenal of Democracy, by Donald
M. Nelson, Sept 12 p 145
Canadian Mines Handbook, 1946,
Nov 14 p 178
Design and Operation of the Coal
Planer, Ruhr District, Germany, by U. S. Bureau of Mines,
Dec 26 p 140
Wortime Technical Devel-

many, by U. S. Bureau of Mines, Dec 26 p 140 German Wartime Technical Devel-opments, Aug 29 p 39; Sept 26 p 80; Oct 10 p 67; Nov 14 p

Industrial Expansion in Pennsylvania During the Second World War, by G. L. Leftler, Oct 10

p 112 Industrial Processing Instrument

Industrial Processing Instrument Industry in Germany by U. S. Office of Technical Services, Sept 19 p 146

New Books, July 18 p 74; Aug 22 p 66; Aug 29 p 39, 55; Sept 5 p 53; Sept 19 p 130, 132; Oct 3 p 45; Oct 10 p 152, 169; Oct 17 p 63; Oct 31 p 40, 110; Nov 14 p 95, 178; Nov 28 p 86; Dec 19 p 75; Dec 26 p 129 Patents and the Manufacturer, by the National Assn. of Manufacturers, Oct 17 p 166

Wartime Research in Metalworking Materials and Processes (Reports), Aug 22 p 66

Bopp Steel Corp.: Purchased by Sharon Steel, Sept 26 p 112

Borg-Warner Corp.: Buys Physical Assets of Superior Sheet Metal Co., Nov 14 p 125

Boring and Facing Machine, G eral Engineering Co.*, July

p 79 Jig Borer, Cleereman Machine Tool Co.*, July 4 p 79 Jig Borer, Cosa Corp.*, Sept 12 p

79
Mill, Rogers Machine Works,
Inc.*, July 4 p 79
Special-Purpose Machine, Snyder
Tool & Engineering Co.*, Nov
28 p 78
Tool Holder, Bokum Tool Co.*,
Dec 26 p 72
Two Head Baying Machine, Dayis

Tool Holder, Bokum Tool Co.*, Dec 26 p 72 Two Head Boring Machine, Davis & Thompson Co.*, Nov 28 p 77 Two-Spindle Borer, Moak Machine & Tool Co.*, Nov 28 p 78 Vertical Machine, Giern & Anholtt Tool Co., Nov 28 p 77

Boron: Additions in Some Alloy Steels, Nov 28 p 64

Bourassa, H. E.: Permanent Mold Bibliography, Oct 24 p 50

Boyer-Campbell Co.: Headloupe, Nov 7 p 70

Bradford Machine Tool Co.: Electrical Tools, July 11 p 68

Bradley Washfountain Co.: Washfountain*, Dec 12 p 84

Brady, Joseph S.:
Aluminum Cleaning Procedures*,
Dec 19 p 76

rass:
Corrosion Preventive, Bee Chemical Co., Sept 19 p 68
Deliveries Inadequate, Oct 3 p 106
Mill Production Establishing New
Peacetime Record*, Oct 31 p 89
OPA Raises Ingot Prices, Aug 29 p 108

Brazil: Major U. S. Strikes Hold Back Industrial Expansion in Brazil*, Dec 9 p 114 Steel Mill of National Steel Co. at Volta Redonda Now in Opera-tion, Aug 8 p 104D

More To Shor

Brown, fie Cork M

Brown

Drill

Stra

Brown Pow F

Brunir

Bryan Inte Port

Bryan Gas 21

Buck, Cale

Buehl

Buick P N

Bullar

Bundy

Burea Ear

Lab

Burea

Bul

Det

Ext File

Ind

Nev

Rej

Hy

Pro

qi si

Brazing:

razing:
Aluminum, July 11 p 54
Aluminum Flux, A. K. Mauk,
Oct 24 p 67
Designing for Silver Brazing With
Induction Heating*, Dec 26 p 62
High Frequency Induction Heating*, July 18 p 60
Multioperational Machine, Clinton
Machine Co.*, Oct 24 p 66
Silver Brazing Alloys, Handy &
Harman, Oct 24 p 68

Breeze Corp. : Production of Ignition Radio Shields*, Aug 29 p 56

Brenner, A., and Olson, W. A.: Purification of Rhodium Plating Baths, Sept 12 p 69

Brenner, A., and Riddell, G. E.: Nickel Plating on Steel by Chem-ical Reduction, Aug 8 p 71

Brewin, E.: Rise and Fall of Japanese Indus-trial Empire*, Oct 17 p 114

Bridgeport Brass Co.: Earnings for First Half, 1946, Aug 8 p 144

Briggs Mfg. Co.:
Installs New Porcelain Enameling
Unit in Plumbingware Division,
Nov 7 p 112
Laminated Plastics Introduced;
Many Applications for New Material Seen, Dec 19 p 86
Producing Formed Steel Plumbing
Fixtures*, Nov 7 p 54
Steel Shortage Lays Off 7000, Oct
10 p 114

British Iron & Steel Control Board:
Appointments Received With Some
Criticism, Oct 17 p 88
Members and Main Duties, Sept
26 p 96
Plan to Approve Entire Modernization Plan, Oct 31 p 121
Plans Revised for Steel Control
Board, Sept 26 p 96

British Iron & Steel Federation:
U. K. Steel Statistics, 1944-May
1946, July 25 p 103; June, Sept
5 p 111; July, Oct 3 p 88; August, Oct 31 p 101; September,
Nov 28 p 114

British Iron & Steel Trade Confederation: iews USSR Steel Industry, Sept 12 p 71A

British Steel Founders' Assn.: Fluidity of Converter and Electric Steels, Dec 26 p 65

Broaching:
Automatic Broaching Speeds Auto
Parts Output*, Oct 10 p 66
Horizontal Broaching Machine,
American Broach & Machine
Co.*, July 4 p 78
Rotary Broaches, Fearless Tool
Co.*, Dec 26 p 71

Brooke, E. G., Iron Co.: Raises Price of Pig Iron \$2 a Ton, Nov 28 p 12

Brooks Equipment Corp.: Universal Joints*, Aug 1 p 70

Brooks Rotameter Co.: Full-View Rotameter*, Aug 15 p 67

Brosius, Edgar E., Co., Inc.: Purchased by Group of Industrialists, Dec 5 p 144

Brown, D. I.:
C-I New Extra Price Card May
Set Pattern for Industry*, Dec

26 p 99
Current Steel Demand Tests Complex Quota System*, Oct 17 p

Growing Freight Car Shortage
Rushing Towards Climax*, Sept
12 p 107
Household Appliance Production
Up Despite Acute Electric Motor Shortage*, Aug 8 p 104D
Market Readjustments Based on
Freight Increases Seen as Premature, July 25 p 102

More Freight, Less Cars Alarm Top Management*, Aug 1 p

auk.

Vith

p 62 eat-

nton

y &

adio

ting

: nem-

dus-

Aug

eling

sion,

iced; Ma-

bing

, Oct

oard: Some

Sept

lerniontrol

ı: -May

onfed-

Sept

lectric

Auto

chine, achine

Tool

a Ton,

70

15 p

: ustrial-

d May s Com-t 17 p

hortage *, Sept

duction ric Mo-104D sed on as Pre-

Shortages Cause Run on Commercial Loans by Small Plants*, Sept 5 p 110
Steel Consumers Agree to Reduce Top-Heavy Backlogs, Nov 7 p

Steel Deliveries Now Being Governed by Quota System, Dec 19 p 111
Steel Fabricators' Supplies Vary; Freight Embargo Seen As Terrific Blow, Dec 5 p 119
Tantung — What It Is, How to Use It*, Nov 14 p 76

Brown, David, & Sons (Huddersfield) Ltd.:

Cork Slab Foundation for Heavy Machine Tools*, Sept 19 p 64
Floating Reamers, Nov 7 p 68
Surface Finish Measuring Instrument, Topograph*, Dec 19 p 81

Brown Instrument Co.: Process Adjuster*, Oct 17 p 74

Brown, Leo G., Engineering Co.: Drill Press Converter*, Dec 26 p

Brown, W. F., Jr., and Jones, M. H.: Strain Analysis by Photogrid Method*, Sept 12 p 50

Browning, E. H.: Power and Power Factor in Arc Furnace Operation, Oct 17 p 63

Bruning, Charles, Co., Inc.: Slide Rule, Oct 10 p 80

Bruno Tools:
Adjustable Circle Cutter*, Sept 5
p 67

Brush Development Co.: Surface Analyzer*, Dec 19 p 81

Bryant Chucking Grinder Co.: Internal Grinder*, Sept 12 p 78 Portable Thread Gage*, Sept 5 p

Bryant Heater Co.: Gas Combustion Element*, Nov 21 p 76

Buck, Robert M.: Calculating Coil and Burner Re-quirements for Gas-Fired Immer-sion Heating*, July 11 p 46

Buda Co.: Hydraulic Jacks*, Dec 12 p 84

Buehl, R. C., Shoub, E. P., and Riott, J. P.: Production of Low-Sulfur Sponge Iron, Nov 28 p 66

Buick Modernizes Cylinder Bore Production, by H. E. Linsley*, Nov 21 p 65

Bullard Co.: Hydraulic Spacer Replaces Drill Jigs*, Sept 26 p 73

Bundy Tubing Co.: Cost Saving Plan Adds to Employee Base Pay of Oct 31 p 64,

Bureau of Labor Statistics: Earnings for Industrial Workers Up \$5 Weekly, Dec 5 p 126 Labor-Management Disputes, 1935-39, 1944-46, Dec 12 p 92

39, 1944-46, Dec 12 p 92

Bureau of Mines:
Awards Safety Trophies to Mines and Quarries, July 25 p 136

Bulletin on German Lithium Industry, Sept 19 p 132

Details of Unique German Coal Planer Disclosed, Dec 26 p 140

Extensive Data on German Iron Ores Revealed, Dec 19 p 152

Films on Aluminum Brazing and Welding Added, Dec 26 p 113

Industrial Coal Stocks on Hand, Oct 24 p 104

New Films on Steel and Nickel Soon to Be Released, Nov 28 p 142

Reports Available on Investigation Results of Mineral Deposits, Oct 10 p 152

Undertakes \$1.5 Million Shale Oil Demonstration*, Aug 8 p 111

Bureau of the Census: Foreign Div. to Remain in Washington, Aug 8 p 104A

Burg Tool Mfg. Co.: Releasing Tap Holder*, Aug. 29 p 62

Burndy Engineering Co., Inc.: Connector Tool*, Oct 10 p 79

Buschman, E. W., Co.: Portable Conveyor, Aug 8 p 75

Butler, A. R., and Kessler, F. E.: Arcwelding Tool Steel, Nov 28 p

Butler, G. M., Jr., and Gippert, L. E.: Changes in Size and Toughness of High Carbon—High Chromium Steels Due to Subzero Treat-ments, Nov 28 p 58

Calculating Coil and Burner Require-ments for Gas-Fired Immersion Heating, by R. M. Buck*, July 11 p 46

Calculator Co.: Slide Rule for Calculating Press Size*, Nov 28 p 69

California Scrap Iron Corp.:

Buys Surplus Scrap Plant, Dec 5
p 134

Callite Tungsten Corp.: Switch Facing Material*, Aug 1 p 69

Campbell, Tom:
British Steel Head Seeks 2 Million
Tons of American Steel*, Oct
24 p 95
Cement Case Seen Weakening FTC
Stand on Steel Basing Points,
Oct 3 p 85
Coal Crisis Brings Gloomy Outlook; May Set New Wage Pattern, Nov 28 p 109
Death Knell of OPA Finds a
Cautious Attitude in Industry,
July 4 p 107
Eye Near Term Steel Market with
Caution; Long Range Prospects
Good, Oct 10 p 107
Geneva Steel Making Rapid Gains
in Resuming Production*, Aug
1 p 109
Labor Tension to Ease, Distribution to Improve with Controls
Off, Nov 14 p 127
Major U. S. Strikes Hold Back
Industrial Expansion in Brazil*,
Dec 19 p 114
Steelworkers to Ask Healthy Wage
Increase in January, Oct 31 p
97

Campbell, W. J.: Welding Jet Engine Parts*, Sept 5 p 46

Can Manufacturers Institute: Can Making Capacity to Be Boosted by 20 Pct, Aug 8 p 115

Aluminum May Be Bought by U. S. for Housing Program, Nov 7 p 118
Aluminum Nail Tests Win Approval, Nov 21 p 120
Aluminum Price Increase Set, Sept 12 p 122
Auto Price Ceilings Raised, Other Increases Reported Imminent, Dec 26 p 104
Awaits Effects of Dropping OPA, July 11 p 103
Base Metal Producers Ask Sharp Increase in Prices, July 11 p 108

Basic Steel Mills Return to Pre-strike Operating Levels, Dec 12 p 114 Blast Furnace Capacity and Pro-duction, 1936-1946, Nov 14 p 138 Blast Furnaces, Location, Number of Stacks, Capacity, Nov 14 p 138

Buyers of U. S. Farm Equipment Get Dollar Benefits, Oct 3 p 62 Canadian House Committee Hears Wage Demand Called Spur to Inflation, Aug 1 p 107 Ceilings on Base Metals to Be Retained, Nov 14 p 146

CIO Makes Final Offer in Steel Strike, Asks 15½¢ Increase, Aug 8 p 106
Construction in '46 Planned to Exceed \$1.1 Billion, Nov 7 p 150
Controller Studies Steel Picture, July 4 p 96
Copper Production, May, Aug 22 p 116; August, Nov 7 p 118
Dollar Parity Seen as Slight Boon to Canadian Steel Purchasers, July 25 p 101
Dollar Revaluation May Help Canadian Machine Tool Buyers, July 25 p 124
Farm Implement Output Up 7.3
Pct, Sept 5 p 154
Government Delays Action to Hike Domestic Metal Prices, July 25 p 96
Hudson Bay Mining & Smelting

Domestic Metal Prices, July 25 p 96
Hudson Bay Mining & Smelting
Co. Operations at Flin Flon*,
Aug 22 p 105
Industry Expansion Projects Total \$700 Million, July 11 p 84
Iron and Steel Output Not Yet Affected by U. S. Coal Strike,
Dec 5 p 124
Labor, Management in Deadlock on Demands in Steel Strike, Aug 15 p 97
Lead, Copper Output to Be Raised, Oct 31 p 110
Lead Production, June, Sept 12 p 122; August, Nov 7 p 118
May Face Steel Strike If Unions Find Wage Offers Too Low,
July 11 p 109
Metal Producers to Be Reimbursed for Exports at World Prices,
Nov 28 p 156
Nail Famine Will Be Intensified by Strike, Sept 26 p 118
Nickel Production, May, Aug 22 p 116; August, Nov 7 p 118; September, Dec 12 p 117
Nine Industrial Fields Affected by Labor Union Strikes, Sept 5 p 99
Pig Iron and Ferroalloys Production, Lander 1006

Aline Industrial Fields Affected by Labor Union Strikes, Sept 5 p 99 Pig Iron and Ferroalloys Production, Jan-June 1946, Aug 29 p 100; August, Nov 14 p 204; September, Nov 21 p 112; October, Dec 26 p 110 Prices on Imported Farm Machinery Increased, July 4 p 146 Reconversion of Industry Nearly Accomplished Survey Shows, Sept 12 p 147 Reduction in Tariffs Announced, July 18 p 113 Sales of Pig Iron, Ferroalloys, Steel Ingots, Castings, and Finished Rolled Products for 1944 Drop 5 Pet, Oct 3 p 94 Seeks Larger Share of U. S. Steel, July 4 p 118 Shortages Cut Work Week of Locomotive Employees, July 11 p 84 Silver Production, June, Sept 12 p 122; August, Nov 7 p 118 Steel Co. Finds Steel Demand at New Peak Levels, July 11 p 109 Steel Distribution, 1944, Aug 8 p 138 Steel Firms Seen to Have Full

Steel Distribution, 1944, Aug 8 p 138
Steel Firms Seen to Have Full Production in 4 to 6 Weeks, Oct 24 p 99
Steel Industry Looks Ahead to Self-Sufficiency*, Nov 14 p 136
Steel Ingot Capacity and Production, 1936-1946, Nov 14 p 137
Steel Ingots and Castings, Apr and May, Aug 1 p 147; June, Aug 29 p 100; July, Oct 10 p 166; August, Nov 14 p 202; September, Nov 21 p 114; October, Dec 26 p 110
Steel Mills' Operating Schedules Now at Prestrike Level, Nov 28 p 114

Steel Mills' Operating Schedules Now at Prestrike Level, Nov 28 p 114
Steel Mills Resume Output With Order Books Closed on Many Items, Oct 31 p 102
Steel Production and Shipments by Products and Consuming Industries, Apr and First Quarter, July 4 p 118; May, Sept 5 p 154; June, Oct 3 p 94; Third Quarter, Dec 26 p 110
Steel Strike Continues With Little Hope for Early Compromise, Aug 22 p 99
Steel Strike Drastically Reduces Ingot Operating Rate, July 25 p 96
Steel Strike Ends After 81 Days; 100,000 Tons Ready to Move, Oct 10 p 118
Steel Strike Hits Fabricator Plants, Aug 8 p 106

Steel Strike May End as Union Weakens on Pay Issue. Sept 19 p 103 Steelmakers Plan Fight to Finish, Aug 29 p 105 Strike at Tube Making Plant Cuts Steel Output, Aug 1 p 107 Strike Hits Steel Plants Despite Government Seizure, July 18 p 105 Strikes at Plants of Pin Th

Strikes at Plants of Big Three of Steel Industry, Not Based Upon Collective Bargaining, Says Jus-tice Roach, Aug 1 p 107 Surplus Disposal Hits \$26,100,000 in June, Sept 5 p 138 Surplus Sales by WA Corp., July 4 p 105 Zinc Production, June, Sept 12 p 122; August, Nov 7 p 118

Canadian Liquid Air, Ltd.: New Process Developed to Cut Melting Time of Pig Iron, Scrap, Sept 26 p 123

Carbide Tools: Cutters, Wendt-Sonis Co.*, Dec

Cutters, Wendt-Sonis Co.*, Dec 26 p 71 Drills, Willey's Carbide Tool Co., Dec 26 p 72 Knurling Rolls Improvised from Carboloy Outlast Steel, Nov 28

p 66 Tool Bit, Super Tool Co., Dec 26 p 72 Using Coolants, July 18 p 67 (See also Tools, Cutting)

Carboloy Co., Inc.: Coolants Used With Carbide Tools, July 18 p 67

Carnegie-Illinois Steel Corp.:

Bid for Defense Plant Facilities
Accepted by WAA, July 4 p
110
Cox Succeeds Perry as President,
Aug 1 p 99
Dept. of Justice Approves WAA
Sale of Homestead, Duquesne
and Bradford Plants, Aug 1 p
114

Dr. Bain Wins Sauveur 1946
Award, July 25 p 109
Graduate Program in Metallurgy
for Workers, Oct 10 p 168
Mahoning Valley Residents Tour
Plants*, Nov 7 p 101
New Extra Price Card May Set
Pattern for Industry*, Dec 26

p 99 Pittsburgh Production Rate Hurt by Hostlers' Strike, July 11 p 107 Sued by Union for \$120 Million Walking-Time Pay, Dec 12 p 122

Cartels:
Law Suits Filed Against Bearing
Makers, Aug 8 p 116
Scrap Cartel Due to Appear If
and When Europeans Can Import from U. S., Aug 8 p 90

Case (The) for 100 Pct X Ray Inspection of Aircraft Castings, by J. G. Schneeman*, Oct 10 p 56

Case School of Applied Science: Strain Measurement by Ph grid Method*, Sept 12 p 50 Photo-

Cast Iron:
Practical Method of Specifying
Grades, Oct 31 p 46
Selecting the Correct Type of Cast
Iron*, (2 Parts) Oct 17 p 64;
Oct 24 p 58
Soil Pipe Prices Increased, Aug
22 p 99
Swedish High Frequency Furnace*, Dec 5 p 86
Test Bar Data v. Casting Properties, Sept 26 p 70

Casting, Centrifugal:
Hydraulically Operated Machine*,
July 25 p 48
Status of Practice in Germany,
Reported by James T. MacKenzie*, July 25 p 46
Welding Rod Casting Machine*,
Nov 21 p 55

Casting, Die:
Cold Chamber Diecaster, Hydropress, Inc., Oct 3 p 56
Diecasting Machine, DCMT Sales
Corp., Oct 3 p 56
High-Pressure Diecasters, Hydraulic Press Mfg. Co.*, Oct 3 p
56

Production of Aluminum Outboard Motor Parts*, Aug 15 p 50

Casting, Permanent Mold: Bibliography, 1921-1946, Oct 24 p

Process and Production Economies in Castings", Oct 3 p 42

Casting, Precision:
Heat - Treatable Copper-Base Alloys*, Sept 19 p 48
Melting and Casting Combined in One Unit*, Oct 31 p 49

Casting Aluminum Billets for Extruding, by R. W. Graham*, truding, by Dec 26 p 52

Castings, Ferrous:

Administrator Small Forecasts
Easing of Iron, Steel Castings,
Sept 5 p 113
Canadian Sales for 1944 Drop 5
Pct; Production Increases, Oct
3 p 94
Case for 100 Pct X Ray Inspection of Aircraft Castings*, Oct
10 p 56
Clean 5600 Lb. in 15 Min.*, July
18 p 72
Decontrol of Castings Covered
Under RPS 41, Oct 10 p 114
Eliminated from CPA's Certification Plan, Sept 12 p 119
Gray Iron Castings Shipments Up
During July, Sept 26 p 150
Heavy Backlog Expected to Sustain High Foundry Output, Aug
15 p 130
Industry Faces Casting Shortages,
July 25 p 110
Priority Applications Require Supply Source, Oct 24 p 103
Shipments in 1945 Topped 1.9
Million Net Tous, July 18 p 144
Test Bar Data v. Casting Properties, Sept 26 p 70
Castings, Nonferrous:

Castings, Nonferrous:
Aluminum Die Casting Outboard
Motor Parts*, Aug 15 p 50
Case for 100 Pct X Ray Inspection of Aircraft Castings*, Oct
10 p 56
Precision Casting Heat-Treatable
Copper-Brise Alloys*, Sept 19
p 48
Resi

p 48 esinous Sealants for Porous Cast-ings, Nov 14, p 90 Re

Caterpillar Tractor Co.: Establishes 2-Yr Sheet Metal Training Course*, Oct 24 p 109

CCA Products Engineering: Air Tool Lubricator*, Aug 22 p Air 68

Cemented Carbides: Strip Mill Rolls, Sept 5 p 61

Central Scientific Co.: Electropolisher*, Dec 5 p 90

Centrifugal Casting Machine Co.: Welding Rod Casting Machine*, Nov 21 p 55

Champion Machine & Forging Co.: Declared Surplus by WAA, Aug 1 p 82

Chase Brass & Copper Co.: Buys Euclid Mill, Sept 12 p 122

Chase, Herbert:
Die Casting Outboard Motor
Parts*, Aug 15 p 50
Plating Auto Hardware*, Sept 19
p 59
p.11-1

p 59
Polishing and Buffing Die Cast
Auto Hardware*, Sept 5 p 58
Wire Forms and Stampings Make
Good Partners*, Oct 17 p 48

Chemicals: oda Ash Production, Distri tion, New Construction, Oct p 70 Distribu-

p 70
Sodium Fluoride Fumes from Steel
Ingots Injurious to Ford Workers, Union Charges, Oct 24 p
70; Nov 7 p 106
Sodium Fluoride Issue at Ford
Stalemated, But May Be Settled Without a Stoppage, Nov

14 p 102

Chicago-Latrobe Twist Drill Works: Short Drills, Nov 7 p 67

Credits Granted for Purchases in U. S., Oct 24 p 106

Farm Implement Goal Set at \$21 Million by UNRRA, Oct 31 p 104

Chrysler Corp.:
Union Seeking Industry Wage
Pattern, Oct 31 p 64
Wage Increase to Be Discussed
with UAW-CIO, Sept 12 p 155

Cincinnati Bickford Tool Co.: Upright Drill*, July 4 p 78

Cincinnati Grinders Inc.: External Grinder*, July 4 p 77 Hydraulic Grinding Machine*, Nov 28 p 78

Cincinnati Milling Machine Co.: Cutter and Tool Grinder*, Sept 12 p 77 Milling Machines*, July 11 p 67; Sept 12 p 78

Civilian Production Administration: Additional Products Added to List of Inventory Controls, July 25 p 107

p 107
Allocation Orders Modification
Now Possible, Oct 3 p 90
Aluminum Sheet and Extrusion
Industry Advisory Committee
Members, Oct 24 p 106
Amendment Cuts Buyer Searches
Through WAA Stocks, Nov 21

Through WAA Stocks, Nov 21

Brass Mill Committee Walks Out
on CPA, Sept 19 p 112
California Tops Nation in Nonhousing Construction Permits
Even with Keen NHA Vigilance, Nov 14 p 110
CC and MM Ratings Revived,
Aug 1 p 99
Certification Plan for Pig Iron
Continued; Iron Castings Aid
Out, Sept 12 p 119
Decontrols Some U. S. Copper
Scrap, Dec 5 p 132
Direction 18, Highlights of Amendment, Nov 7 p 104
Du Pont Ranked Highest on War
Facility List, Nov 7 p 136
Establishes Iron and Steel Ratings for Fourth Quarter, Aug 15
p 108
Foreign Freight Car Orders Must

p 108 Freight Car Orders Must Take Back Seat, Dec 26 p 88 Housing-Type Nails Subject to 50 Pct "Set-Aside," Nov 14 p 143 Inventories Show Record Rise in September, Nov 7 p 111 Inventory Rules Tightened, Nov 7 p 74 Lead Quotas Increased, Nov 28 p

Lead Set-Aside Dropped, Dec 19 p 128 Limits CC Rating Orders, July 4 p 115

Limits CC Rating Orders, July 4 p 115
Liquidation of Emergency Controls Seen, Dec 12 p 116A
Loan of Technical Consultants
Asked to Help Solve Steel Problems, Oct 17 p 103
Percentage Limitation May Ruin
CPA's New Export Priorities
Program, Aug 1 p 102
Pig Iron Carryovers and Unfilled
Certified Orders for December
Cancelled, Dec 26 p 115
Pig Iron for Brakeshoes, Housing, to Be Increased, Sept 19 p 100;
Amendment, Sept 26 p 112
Pig Iron Ratings Extended, Dec 5 p 94
Plans to Resurrect Wartime Salvage Groups to Fulfill Scrap
Needs, July 25 p 95
Priority Ratings for Steel Expected, Aug 8 p 104C
Restrictions on Delivery of Bituminous Coke Still in Effect, Dec 12 p 112
Scrap Inventory Control Now in Effect, Oct 24 p 116
Small Cautions Both Labor and Management on Wage and Price Increases, Nov 21 p 82
Small Denies CPA Will Crowd Books with Rated Orders in Fourth Quarter, Sept 12 p 114
Small Forecasts Easing of Iron, Steel Casings, Sept 5 p 113
Small Predicts Easing of Steel Situation After September, Aug 22 p 76
Soil Pipe Rules Changed, Sept 26

22 p 76 Soil Pipe Rules Changed, Sept 26

p 112 Speedy Scrapping of Agency Urged by Small, Nov 21 p 88 Steel Demand, First Half 1947, Estimated at 29 Million Tons, Nov 21 p 106

Subsidizing Marginal Blast Fur-naces Considered, Aug 29 p 93 Textile Machinery in Three More Groups Loses Priority Ratings, Oct 24 p 76 Tin Controls Retention Asked by Can Manufacturers' Committee, Nov 21 p 124 Tinplate Order Revised, Dec 26 p 115

To Act Against Lead Battery Violations, July 4 p 124
Urgency Certificates Extended to Surplus Materials, July 11 p 107
Veteran's Housing Program Aided by Additional Priorities, Sept 26 p 168
Watches, UNRRA Machinery

Watches UNRRA Machinery Schedule, Sept 5 p 145 Will Certify Key Worker for De-ferment, Sept 5 p 112

Clatfelter, H. C., Co.: Drill Holder Bushing, Aug 22 p

Cleaning and Finishing: Abrasive, 32 Alundum, Reduces Grinding Costs*, Nov 21 p 56 Alkaline Electrotinning, July 25

p 58
Alkyd Resins Lack Hampers Product Output, Nov 7 p 113
Alodizing, New Aluminum Surface
Treatment*, Dec 5 p 64
Aluminum Paint, Nankee Aluminum Paint Co., Dec 5 p 90
Aluminum Procedures*, Dec 19 p
76

Barrel Plater, Lasalco, Inc.*, Sept 19 p 67 Brass Corrosion Preventive, Bee Chemical Co., Sept 19 p 68 Briggs Introduces Laminated Plas-tics; Many Applications for New Material Seen, Dec 19 p 86

Bright Dip Formulas, Waverly Petroleum Products Co., Sept 19

Britehoning, a Metal Finishing Process, for Small Parts, Aug

Britchoning, a Metal Finishing Process, for Small Parts, Aug 29 p 50
Buffer and Grinder, Hobart Bros. Co., July 11 p 68
Coating Thickness Gage, American Instrument Co., Dec 5 p 90
Coloring Magnesium Alloys by Manodyz Process*, July 25 p 59
Continuous Air Dryer, Optimus Equipment Co.*, Sept 19 p 66
Copper Stripping Methods, Sept 19 p 65
Diamond Abrasive, Bay State Abrasive Products Co.*, July 25

19 p 65 iamond Abrasive, Bay State Abrasive Products Co.*, July 25

Diamond Compound, Engis Equipment Co.*, Sept 19 p 68
Dip-Agitating Machine, Mabor Co.*, Dec 5 p 87
Electro - Cleaned Steel Examined by Electron Diffraction, Oct 10 p 70

p 70
Electroplaters' Periodic Chart,
Nov 28 p 51
Electroplating Generators, Motor
Generator Corp.*, Dec 5 p 89
Electropolisher, Central Scientific
Co.*, Dec. 5 p 90
Electropolishing Aluminum, Sept
5 p 52
Electropolishing

5 p 52 Electropolishing of Silver, Aug 1

p 49
Embrittlement Reduction in Electroplating*, Nov 21 p 69
Enamel and Paint for Plastics*, Dec 26 p 46
Enameling Fixture, Stanwood Corp.*, Dec 5 p 89
Enameling Problems Discussed at Meeting, Oct 24 p 109
Fingerprint Remover, Freedom-Valvoline Oil Co., Sept 19 p 68

5600 Lb of Castings Cleaned in 15 Min*, July 18 p 72 Flame Sprayed Plastics*, Aug 22 p 64

Fired Immersion Heating*, July 11 p 46 German Bimetal Tubing, Nov 28

p 76
Glycerine Use in Metal Coatings,
Oct 10 p 67
Hot Air Dryer Doubles Galvanizing Output*, Aug 8 p 54
Hot Tank Cleaner, Turco Products, Inc., Dec 5 p 88
Insulating Varnish, Irvington Varnish & Insulator Co., Dec 5 p 90

5 p 90 Liquid Polishing and Buffing Com-pounds, July 25 p 60 Lubrice Treatment in Cylinder

Bore Production*, Nov 21 p 65 Magnesium Joining Process, Sep 12 p 65

Magnesium Joining Process, Sept 12 p 65
Mercil Plating Apparatus with Pumping Equipment, Hanson-Van Winkle-Munning Co.*, Sept 19 p 66
Metal Cleaners, Pennsylvania Sala Mig. Co., Dec 5 p 88
Metal Finishers Plan National Association*, July 25 p 58
Metal Finishing Methods Discussed at Electroplaters' Convention*, Aug 8 p 68

Bitum Mee July Britan

tion Britain

Rev Britain Mar British Min British

crea 121 British

British Nov Carrie Coa Chicag

in barg Nov

Crisis May Nov Czech:

gan Europ Wo

Europ

Ex-Ri Use Aus Found 15

Freigh 78

Frenc Allo

port 84

Krug

Mine

Miner Say Mines P 1 No 1 Min 99 Polan Aid Ger Polisi

Repu 14 Saar I

Da Steel Co: 24

Strik Op

Trun

Metal Finishing Methods Discussed at Electroplaters' Convention", Aug 8 p 68
Metal Washing Machine, Optimus Equipment Co.", Dec 5 p 88
Metallizing Gun, Metallizing Engineering Co.", Sept 19 p 68
One-Dip Degreaser, Detrex Corp., Dec 5 p 88
Parts Cleaning Systems, Gray.
Mills Co.", Sept 19 p 67
Phosphate Coating, American Chemical Paint Co., Sept 19 p
68

Pickle Inhibitor, Oakite Products, Inc., Dec 5 p 87
Plastic Coating, Standard Associates, Inc., Dec 5 p 89
Plastic Film Assures Safe Storage and Shipment of Machinery, Aug 29 p 96
Plastic Insulator, Nov 14 p 74
Plating Auto Hardware*, Sept 19 p 59

Aug 29 p 96
Plastic Insulator, Nov 14 p 74
Plating Auto Hardware*, Sept 19
p 59
Polishing and Buffing Die Cag
Auto Hardware*, Sept 5 p 58
Porcelain Enamel Coating for
Aluminum, Aug 15 p 60
Portable Plating Barrel, HansonVan Winkle-Munning Co.*, Dec
5 p 89
Power Brushes, Osborn Mfg. Co.*,
July 25 p 63
Purification of Rhodium Plating
Baths, Sept 12 p 69
Rack Coating, Michigan Chrome
& Chemical Co., Dec 5 p 90
Rust Preventive, Pennsylvania Sak
Mfg. Co., Dec 5 p 88
Rust Remover. Nox-Rust Chemical Corp., Dec 5 p 87
Sandblasting Machine, Leiman
Bros., Inc.*, Sept 19 p 67
Sanding Wheel, Sand-O-Fler
Corp.*, Dec 26 p 72
Self-Emulsifying Solvent, Oakite
Products, Inc., Dec 5 p 88
Separating Small Parts After De
burring, Oct 31 p 49
Silcone Resin, Dow Corning
Corp., Dec 5 p 90
Soda Shower for Cleaning Locomotives*, Sept 12 p 159
Soft Water Rinse Improves Aluminum Finishes*, July 11 p 58
Spray Booth Coating, Harris Soap
Div., Hygrade Food Products
Corp., Dec 5 p 90
Spray Booth Coating, Harris Soap
Div., Hygrade Food Products
Corp., Dec 5 p 89
Spray Gun, Eclipse Air Brush
Co.*, Dec 5 p 87
Steam Cleaning Detergent, Oakite
Products, Inc., Dec 5 p 87
Steam Cleaning Detergent, Oakite
Products, Inc., Dec 5 p 87
Steam Cleaning Detergent, Oakite
Products, Inc., Dec 5 p 87
Steam Cleaning Detergent, Oakite
Products, Inc., Dec 5 p 87
Steam Cleaning Detergent, Oakite
Products, Inc., Dec 5 p 87
Steam Cleaning Unit, Turce Products, Inc., Oct 10 p 78
Surface Finishes for Aluminum*,
(3 Parts) Aug 29 p 40; Sept 5
p 50; Sept 12 p 66
Surface Quality Standards Data
Sought by Gear Group, Nov 21
p 144
Vapor Degreaser, Detrex Corp.*,
Sept 19 p 66

Frenc in J Frick Sup serv Germa Germa 26 Germa Zon Coa Indus 24 Italian

Sought by Gear Group, Nov 21 p 144 Vapor Degreaser, Detrex Corp.*, Sept 19 p 66 Vapor Steam Cleaner, White Es-gineering & Míg. Co.*, Sept 19 p. 67

p 67 X Ray Diffraction Studies Electrodeposits, July 25 p 61 Washing Machine, Industr Washing Machine Corp.*, D 5 p 88 (See also Electroplating)

Cleereman Machine Tool Co.: Jig Borer*, July 4 p 79

Cleveland Graphite Bronze Co. Ended Ended Truing Mi WAZ Mi West hine for p 66 Sh Critically (; Some wo 28 F You Earnings, Nine Months Sept. 30, Nov 7 p 101 Producing Electroplated Bearing, July 11 p 126

Clinton Machine Co.: Multioperational Machine Metalworking*, Oct 24 p 66

Auto Steel Supplies Critically
Short in Coal Strike; Some W.
Shutdowns in Sight, Nov 28 p

P 65 Sept

anson-, Sept a Sah

ational

ptimus 88 g En-68 Corp.,

Gray. rican 19 p Prod. As-

torage inery*, 74 ept 19

Cast p 58 g for

lanson.

. Co.* Plating

Chrome 90 nia Salt

Chem-

Leiman O-Flex Oakite 88 ter De

Corning Loco

Alum-p 58 is Soap roducts

Detrex

Brush

Oakite 87 OProd-

ninum*. Sept 5

Bituminous Research Group Holds
Meeting; Reelects Directors,
July 18 p 156
Britain Settles Coal Compensation Figure, Aug 22 p 151
Britain's Essential Work Order
Revoked, Aug 15 p 140
Britain's Supply Below Safety
Margin, Aug 22 p 145
British Board Prepares to Take
Mines, Aug 1 p 86
British Exports to Europe Decrease in August, Oct 10 p
121
British Mines' Transfer to Na-

British Exports to Europe Decrease in August, Oct 10 p 121
British Mines' Transfer to National Ownership Due Jan. 1, Dec 5 p 162
British Production More Costly, Nov 14 p 207
Carriers Ask Higher Rates on Coal and Coke, July 18 p 150
Chicago Rate Falls to 75½ Pct in Coal Crisis; Freight Embargo Will Cause Paralysis, Nov 28 p 111
Crisis Brings Gloomy Outlook; Nay Set New Wage Pattern, Nov 28 p 109
Czechs Join European Coal Organization, Aug 15 p 140
European Mines Start Recovery; World Shortage Hits Imports, Oct 3 p 74
European Production, by Country, April, May, July 25 p 152; June, Oct 3 p 14; July, August, Oct 10 p 121
Ex-River Coal Rate Cut Lost to Users Beacuse of New Hike, Aug 1 p 108
Foundry Coal Decontrolled, Aug 15 p 100
France and Belgium Reach Compromise, Oct 31 p 78
Freight Rate Extended, Nov 7 p 78
French and British Opinion on Allocation of Ruhr Coal Ex-

78
French and British Opinion on
Allocation of Ruhr Coal Exports Differ Sharply, Sept 5 p
84

ports Differ Sharply, Sept 5 p
84

French Imports Decline Sharply
in June, Aug 29 p 78

Frick Opens Robena Mines as
Supplement to Coking Coal Reserves, Sept 19 p 98

German Planer Details Disclosed
by U.S. Bureau of Mines, Dec
26 p 140

German Steel Output in British
Zone Faces Curtailment Due to
Coal Crisis, Nov 7 p 84
Industrial Stocks on Hand, Oct
24 p 104

Italian Economists Ponder Absence
of Coal and Iron Ore, Aug
29 p 70

of Coal and Iron Ore, Aug
29 p 70
Krug to Freeze Coal in Transit
at Inland and Tidewater Ports,
Nov 21 p 105
Mine Operators Fear Permanent
Government Occupation of
Mines, July 25 p 99
Miner Picture Greatly Distorted,
Says Sykes, Dec 19 p 120
Mines Get Safety Code, Sept 19
p 150
No Agreement Reached in 1841

No Agreement Reached in J&L Mines Foremen Case, Aug 22 p

ninum.
Sept 5

s Data
Mov 21

Corp.*

dite EaSept 19

dies of p 61

diustrial

.*, Dec

Co.:
Ended
Engine

Co.:
Ended
Engine

Co.:
Ended
Washings on Approves Order Allowing Unionization of J & L

Mines Foremen Case, Aug 22 p

poland Offers Only Substantial
Aid as Export Prospects from
Germany Darken, July 4 p 94

Polash Output Up, July 4 p 88

Republic Steel Challenges Unionization of Mine Foremen, Nov

14 p 174

Saar Mines Under French Management Average 24,000

Coal Supply This Winter, Oct

24 p 104

Strike Begins to Curtail Steel
Operations in Pittsburgh Area,
Nov 28 p 111

Strike May Stop Some Motor
Producers This Week, Dec 5
p 92

Truman Approves Order Allowing Unionization of J & L
Mine Foremen, Aug 15 p 106

WAS Asks Bids on Coking Coal
Mines, Oct 17 p 146

West Coast Steel Producers

Washington, Dec 19 p 90

Young stown Co. Objects to
NLRB Mine Election, Aug 15

Coatings: (See Cleaning & Finishing)

Code Electric Products Corp.: Switchbreaker, Aug 1 p 69

Cohen, J.B., Hurlich, A., and Jacob-son, M.: Metallographic Etchant to Reveal Temper Brittleness in Sterl, Nov 28 p 57

Coke:

AFA to Sponsor Broad Study of
Foundry Coke Quality and Behavior, Dec 19 p 124
Battery Rebuilt at C-1 Clairton
Works, Aug 1 p 115
Carriers Ask Higher Rates on
Coal and Coke, July 18 p 150
CPA Restrictions on Delivery
Still in Effect, Dec 12 p 112
Domestic Use Declines; Exports
Stage Sharp Gain in 1945*,
Aug 29 p 120
France and Belgium Reach Compromise, Oct 31 p 78
OPA Increases Price on Beehive;
Makes Other Ceiling Changes,
Aug 29 p 93
Order Amended by CPA, Dec 19
p 123
Resale Prices Gain, Sept 5 p 112

p 123 Resale Prices Gain, Sept 5 p 112 Supplies Dip to New Low Point, July 25 p 96

Colorado Fuel & Iron Corp.: Earnings, Third Quarter, Nov 7 p 101

p 101 Expansion Program for Minnequa Plant Outlined, Oct 3 p 102 Meyers, Carl W., Named Presi-dent, Sept 12 p 111

Columbia Steel Co.:
Buys Consolidated Steel, Dec 26
p 82, 100
Places Order for Plant Equipment,
July 25 p 109

Combined Intelligence Objectives Committee: German Methods for Refining Aluminum Airplane Scrap, Oct 17 p 54

Combined Tin Committee:
Tin Allocations, by Country,
Second Half of 1946, Oct 17
p 130; Final Allocation, Dec
5 p 132
Tin Data Filing for Allocations
Required, July 11 p 112

Commentry Industries, Inc.: Single Spindle Swiss Automatic*, July 11 p 66

Committee for Economic Development: Fletcher Resigns as Director, Oct 24 p 110

Communication Measurements Laboratory:
Dual Power Supply, Aug 1 p 68
Frequency Meter*, Aug 15 p 66
Megohm Meter*, Aug 15 p 68
Portable Stroboscope*, Aug 15 p
67

Comtor Co.: Surface Comparator, July 25 p 65

Conference on Productivity:

Experts Seek Common Ground on
Productivity Puzzle, Nov 7 p

Congress of Industrial Organiza-tions: Eyes Net Profits of Industry in Lining Up New Wage In-crease Demands, Nov 28 p 116

Consolidada, La, S.A.: To Expand Ingot and Rolling Capacity*, Sept 26 p 121

Consolidated Steel Corp.: Bought by Columbia Steel, Dec 26 p 82, 100

Consolidated Vultee Aircraft Corp.: Torque Values for Standard AN Bolts and Nuts, Oct 10 p 59

Construction:
AISC Convention Discusses Deterrents to Maximum Efforts,
Nov 7 p 110
Bridge Span, First All-Aluminum,
Installed at Massena, N.Y., Oct
3 p 103

Britain Builds Factories for Rent;
Depressed Areas Are to Benefit,
July 4 p 152
Building Costs Advanced During
Second Quarter of 1946, July
25 p 144
Building Items Put Under Export Control, Aug 22 p 102
California Tops Nation in CPA
Nonhousing Construction Permits Even with Keen NHA
Vigilance, Nov 14 p 110
Canada in '46 Planned to Spend
Over \$1.1 Billion, Nov 7 p 150
Dam Contracts Awarded, July 11
p 80

Canada in '46 Planned to Spend Over \$1.1 Billion, Nov 7 p 150 Dam Contracts Awarded, July 11 p 80 Detroit Industrial Projects Have \$161 Million Eliminated as Result of Shortages, Oct 3 p 92 Earth Mover, Warner & Swasey Co., Sept 12 p 111
Fabricated Steel Industry Has Prosperous Future According to A1SC Reports, Nov 7 p 80 Ferguson Engineers Develop New Low Cost Steel Frame Factory, Nov 21 p 154
Flame Cutting and Welding in Bulldozer Manufacture', Sept 12 p 56
French Steelworks Begin Unfolding Construction Plans, Nov 14 p 116
HH Steel Ratings Eased, Sept 12 p 118
Higgins Co. May Build 10,000 Steel Prefabs, Oct 31 p 107
Industrial Building Cost in Third Quarter Shows 5-Point Gain, Oct 17 p 158
Lack of Concrete Reinforcing Bars, Threaten Construction Plans, Sept 5 p 106
McKiernan-Terry Corp. Awarded Hoists Contract, Oct 3 p 103
Machinery and Equipment Decontrolled, Sept 26 p 116
Munitions Board May Now Issue HH Ratings, Oct 31 p 98
New Ore Bridges Near Completion in Ohio, Aug 29 p 97
OPA Litts Controls on Building Materials, Sept 12 p 119
Prefabricated Plant Production Unit for Foreign Use Planned on West Coast, Aug 22 p 141
Ratio Structures, New Building Technique, Avoids Rafters, Trusses and Load Bearing Walls, Aug 1 p 78
San Francisco Bay's Rate Offers Antidote to Worry of Rail Embargo and Brief General Strike, Dec 12 p 94
Shortages in Housing No Longer Led by Metal Goods, Oct 31 p 106
Standard Design for Light Gage Steel for Construction An-

Led by Metal Goods, Oct 31 p
106
Standard Design for Light
Steel for Construction
nounced, Nov 28 p 140
Steel Awards, July 4 p 121; July
11 p 107; July 18 p 113; July
25 p 109; Aug 1 p 115; Aug
8 p 114; Aug 15 p 111; Aug
22 p 113; Sept 12 p 119; Sept
5 p 113; Sept 12 p 119; Sept
19 p 109; Sept 26 p 123; Oct
3 p 103; Oct 10 p 123; Oct
17 p 127; Oct 24 p 111; Oct
31 p 107 Nov 7 p 115; Nov
14 p 142; Nov 21 p 121; Nov
14 p 142; Nov 21 p 121; Nov
14 p 142; Nov 21 p 121; Nov
14 p 142; Nov 21 p 125; Dec
12 p 123; Dec 19 p 125; Dec
12 p 123; Dec 19 p 125; Dec
26 p 115
Structural Shapes Produced by
Welding*, Oct 17 p 62
Truman Program Will Up Nonresidential Building by 40 Pct,
Forecast Says, Dec 19 p 123
Welded Truss Stresses Tested
with Strain Gages, July 25 p

Consumer Products:

Home Appliance Field Seen As
Threatened by Excess Retail
Dealers, Nov 7 p 155
Household Appliance Production
Up Despite Acute Electric Motor
Shortage*, Aug 8 p 104D
Inventories Show Record Rise in
September, Says CPA, Nov 7
p 111
Kitchen Utensil Output Speeded
by Induction Soldering, Sept 26
p 169
Plumbing Fixtures of Frameled

P 169
Plumbing Fixtures of Enameled
Cast fron Get Price Increase,
Nov 7 p 82
Producing Formed Steel Plumbing Fixtures*, Nov 7 p 54
Westinghouse Reports Substantial
Gains in Appliance Production,
July 18 p 160

Contact Arewelding, by P. C. Van Der Willigen*, Dec 12 p 58

Containers:
Can Companies Indicted, July 4
p 114
Can Making Capacity to Be
Boosted by 20 Pct, Aug 8 p
115

Boosted by 20 Pct, Aug 8 p
115
Gantry Aids Welded Tank Production*, Sept 12 p 70
Pig Tin Quotas for Milk Containers, Raised, July 25 p 150
Plastic Film Assures Safe Storage and Shipment of Machinery*, Aug 29 p 96
Production Falls Short of Demand, Dec 26 p 102
Steel Container Output and Orders Still High, Aug 15 p 99
Steel Drums Get New Price Formula, Nov 7 p 102
Tank Breathers, Pittsburgh Lectrodryer Corp.*, Dec 12 p 82
U.S. Sues American and Continental Can Co., Sept 5 p 98
Sontinental Can Co., Inc.:

Continental Can Co., Inc.:

Earnings, Year Ended Sept. 30,

Nov 7 p 101

Indicted, July 4 p 114

Sued by U. S. for Violation of

Anti-trust Laws, Sept 5 p 98

Contract Termination: Terminations Hit New All-Time High, July 4 p 109

Control Equipment Co.: Metal Indentifier*, July 18 p 75

Conventions:
American Electroplaters' Society
Discusses Metal Finishing
Methods", Aug 8 p 68
AIME Electric Furnace Steel
Committee Holds Fourth Annual Conference; Quality Factors Weighed", Dec 19 p 65
AIME Metals Division Emphasizes Basic Research, Nov 28
p 64

izes Basic Research, Nov 28 p 64 AISC Convention Discusses De-terrents to Maximum Efforts, Nov 7 p 110 AISC Elects Officers, Nov 7 p

AISC Reports Fabricated In-dustry Has Prosperous Future, Nov 7 p 80 AISE Examine Operating Prob-lems*, Oct 10 p 71 AISE Meeting; Program, Sept 26 p 66

26 p 66 ASM Stresses Quality Control and High Productivity*, Nov

26 p 66
ASM Stresses Quality Control and High Productivity", Nov 28 p 52
ASM Will Revive West Coast Show in Spring; Last Was Held in 1941, Oct 10 p 150
ASM E Management Division Hears Conservation of Raw Material Reserves Is National Problem, Dec 19 p 168
ASTE Announces Plans for National Meeting, Sept 5 p 148
ASTM Scans Wartime Developments With Eye to Postwar Era". July 4 p 72
American Welding Society Stresses Metallurgical Aspects", Nov 28 p 59
Electrochemists Discuss Achievements Made During Wartime, Nov 14 p 160
Engineers Discuss New Hydraulic Technique, Nov 14 p 178
Gear Group Seek Data on Simple Standards for Surface Quality, Nov 21 p 144
Illinois Manufacturers Assn. Hears Wilson Strike Out Abuse of Power Under Guise of Unionism. Dec 26 p 113
Institute of Scrap Iron & Steel N. Y. Convention Discussed, Dec 26 p 136
Institute of Scrap Iron & Steel Southeastern Chapter Elects Officers, Nov 14 p 180
International Conference on Trade and Employment Preparatory Committee Meets to Draft Proposal for World Trade Agreement, Oct 31 p 76, 104; Dec 19 p 160
Machine Tool Distributors Condemn Recent WAA Actions; Ask for Reforms, Sept 26 p 111, 124
Metal Finishers Plan National Association", July 25 p 58
Metal Powder Group Elects Officers, Dec 5 p 126
Metal Treating Institute Elects, Dec 5 p 148

National Machine Tool Builders'
Assn. Holds Annual Meeting,
Oct 31 p 112
National Metal Congress Program
of 79 Technical Sessions at Annual Meeting, Nov 7 p 142
National Metal Trades Assn. Favors Repeal of Wagner Labor
Act; Says Fails Its Purpose,
Nov 28 p 152
National Society of Professional
Engineers Making Studies on
New Labor Legislation, Dec 26
p 112
National Tool & Die Manufacture

National Tool & Die Manufactur-ers Assn. Holds Meeting, Nov 7 p.82

Society of Industrial Designers Elects New Officers, Nov 7 p

Society of Plastic Engineers Sch

Society of Plastic Engineers Schedules Convention in Chicago, Jan. 25-31, Nov 7 p 113

Tin Conference Recommends Establishment of International Tin Study Group, Oct 31 p 76

Western Metal Show to Hear Top Rank Scientists, Nov 28 p 147

Conveyorized Automatic Heat Treatment, by A. F. Holden*, Nov 14 p 70

Conway, Martin J.: Oxygen for Industrial Uses, Oct 10 p 74

Cook Electric Co.:
Offset Joints*, Dec 12 p 83
Pressure Switches, Oct 31 p 62

orlants:
Grinding Fuid, Microgrind 70,
Quaker Chemical Products Corp.,
Nov 28 p 82
Internal Friction in Drill Lubricants, July 11 p 45
Protective Value of Industrial Lubricants*, Oct 3 p 46
Pump, Delta Mig. Div., Rockwell
Mig. Co.*, Nov 28 p 82
Used with Carbide Tools, July 18
p 67

Cooper-Bessemer Corp.: Turning Tool Holders*, Aug 29 p 60

Cooper Screw Mfg. Co.: Purchased by Russell, Burdsall & Ward Bolt & Nut Co., Dec 12

Copper:

Acute Shortage Retards Reconversion, Aug 15 p 147
Britain Raises Price, Nov 28 p 98
Canada to Raise Output, Oct 31 p 110
Canadian Production, 1st Five Months 1946, Aug 22 p 116;
August, Nov 7 p 118
CPA to Allocate Copper Scrap,
Sept 26 p 126
Consumption in U.K. Down, First Half 1946, Aug 15 p 84
Controls Placed by CPA, Nov 14
p 184
Deliveries and Production for Au

p 184
Deliveries and Production for August, Sept 19 p 112; September,
Nov 3 p 118
Deliveries Inadequate, Oct 3 p

German Bimetal Tubing, Nov 28

p 76 Imports and Domestic Mine Out-put Drop Sharply in 1945, Aug 8 p 145 Imports Climb in October, Dec 26 p 115

Increases in Shape Premiums, Oct 3 p 106

3 p 106 International Nickel of Canada In-reasing Output, Oct 24 p 114 Mctals Reserve May Release More, Jug 15 p 114 Mctals Reserve Stock Low, July

18 p 116 OPA Denies Price Rise on Primary and Secondary, Sept 26 p 126 Disc Continued at 19.50¢, Dec 26 Continued at 19.50¢, Dec 26

p 118
Price Increase, Nov 14 p 146
Price Raised to 19.50¢, Nov 28 p
126

Production and Consumption, 1st Half 1946, July 25 p 112 Raise Copper Shape Tolls, Oct 17 p 130

p 130 RFC Ends Foreign Purchases, Nov 28 p 126 Scrap of Certain Types Decon-trolled, Dec 5 p 132 Single Price Set by OPA, Aug 8

Stockpile Offered for Housing, July 25 p 112 Stripping Methods, Sept 19 p 65 Subsidies Increased, Sept 19 p 162 U.K. Imports Up, Aug 15 p 114 U.S. Contracts for Chilean Copper, Oct 10 p 126

Corrosion:

orrosion:
Aluminum Surface Treatment, Alodizing*, Dec 5 p 64
Anti - Corrosion Work Aided by Mistakes in Industrial Experience, Sept 26 p 152
Brass Corrosion Preventive, Bee Chemical Co., Sept 19 p 68
Combating Intergranular Corrosion in 18-8 Stainless Steel*, (2 Parts) Aug 8 p 61; Aug 15 p 54

Plastic Film Assures Safe Storage and Shipment of Machinery*, Aug 29 p 96 Protective Value of Industrial Lu-bricants*, Oct 3 p 46 Rust Preventive, Pennsylvania Salt Mfg. Co., Dec 5 p 88 Rust Remover, Nox-Rust Chemi-cal Corp., Dec 5 p 87

Cosa Corp.: Jig Borer*, Sept 12 p 79

Cost Reducing Program for a Job Shop, by P. C. Hamlin*, Sept 26 p 56

Council of Economic Advisers:
Depression Can Be Avoided if
Government, Management and
Labor Use Good Judgment, Says
First Report, Dec 26 p 78

Covel Mfg. Co.: Cutter and Tool Grinder*, Nov 28 p 79

Covert Míg. Co.:
Automatic Press Feeder Prevents
Accidents*, Oct 31 p 56

Cramer, Frank W.: Mill Type Motor Standards, Oct 10 p 73

Crane Co.: Pressure-Seal Valves*, Oct 10 p 78

Cranes:
Cab Cooler, Dravo Corp., Aug 8
p 76
Crane Controller, Electric Controller & Mfg. Co., Aug 8 p 76
Earth Mover, Warmer & Swasey
Co., Sept 12 p 111; *Nov 7 p
53

Gantry, Industrial Equipment Co., Nov 14 p 100 Truck, Milwaukee Hydraulic Corp.*, Nov 14 p 100

Crawford, I. A.:

Creamer & Dunlap Gantry Aids Welded Tank Pro-duction*, Sept 12 p 70

Critical Survey of Controlled Atmospheres, by E. J. Funk, Jr., and Davidlee Von Ludwig, (3 Parts) Sept 19 p 42; Sept 26 p 74; Oct 3 p 50

Cross Co.: Facing and Centering Machine*, July 4 p 79 Rotary Thread Mill*, July 11 p 67

Crozier Machine Tool Co.: Vacuum Grip Lathe*, Dec 26 p 70

Curtiss-Wright Corp.:
Forging Costs Cut by Improved
Die Lubricant*, Oct 17 p 55
Upsetting Tubular Members Simplified by Special Grippers*,
Aug 15 p 42

Cushman & Denison Mfg. Co.: Pocket-Size Marker, Oct 10 p 80

Cutter, P. R.: Coloring Magnesium Alloys*, July 25 p 59

Cutting Stainless Steel With the Electric Arc, by H. S. Linsley*, Nov 14 p 96

Czechoslovakia:
Britain May Increase Czech Imports, Nov 14 p 206

Brno National Armament Works to Make Peacetime Machinery, Aug 1 p 86
Communist Regime Has New 2-Yr Plan, Nov 7 p 129
Industrial Pact Signed With Yugoslavs, Nov 14 p 184
Iron and Steel Industry Faces Huge Task Under New 2-Yr Plan, Nov 14 p 157
Iron and Steel Production, August, Nov 14 p 157
Iron Ore Imports, January, July, August, Nov 14 p 157
Iron Production Climbing, Jan-May, 1946, Aug 22 p 86; May-August, Oct 31 p 101
Joins Coal Group, Aug 15 p 140
Metal Prices Raised, Oct 10 p 121
Metalworking and Machinery Industries Expected to Show Large Loses, Dec 5 p 159
Nationalizes Auto and Aircraft Production, Repair, Aug 1 p 86

D

D. & S. Model Co.: Grinder Attachment*, Nov 7 p 68

Dake Engine Co.: Electric Hydraulic Press*, Oct 3 p 57 Punch Press Guard*, Oct 3 p 58

Daniels, N. J., Tool Co.: Precision Reamers, Aug 29 p 61

Davis, N. L.: Modern Material Handling Ideas for Cutting Costs*, Dec 5 p 68

Davis & Thompson Co.:
Boring Machine*, Nov 28 p 77
Continuous Milling Machines*, July
4 p 77

Dawson, W. B.:
Possibilities of Southern Rhodesia
as a Steel Producer, Sept 19 p
140

DCMT Sales Corp.:
Diecasting Machine, Oct 3 p 56

Dearborn, Howard, Inc.: Tool Adjustment Block*, Aug 29 p 60

Decarburization:
In Highly Stressed Steels*, July
4 p 52
(See also Carburization)

Decarburization in Highly Stressed Steels, by P. A. Haythorne*, July 4 p 52

Defiance Machine Works, Inc.: Valve Hole Machine*, Nov 28 p 78

Degreasing:
One-Dip Degreaser, Detrex Corp.,
Dec 5 p 88
Solvent Degreaser, Mabor Co.*,
Sept 19 p 66

De Laval Steam Turbine Co.: Announces Aircraft Gas Turbine Project, Aug 15 p 128

Finishes for Plastics*, Dec 26 p 46

Delt-Calesco Co.: Infra-Red Preheater*, Nov 21 p 75

Delta Mfg. Div.: (See Rockwell Mfg. Co.)

Denison Engineering Co.: Shuttle Feed Accessory for Use on the Multipress, Oct 3 p 58

De Paola, F. R.: Polarographic Analysis of Zinc in Aluminum Alloys*, Oct 3 p 36

Dept. of Commerce:
Continues Exchange of Economic
Information, July 18 p 92
Expands Activities in Fields of
Distribution, Foreign Trade and
Small Business, Aug 29 p 68
Export Tips Published in Report,
Sept 19 p 130
Exporters Get Leeway in Seeking
Benefits in Trade Agreements,
Dec 26 p 101

Diet

L S

T

Dist

Dol

Dor

Dou

Dov

p

Doy

S

Dra

Dri

Du

Du

Du

Di

GH

Foster Appointed Under Secretary Dec 5 p 126 Harriman Stresses Full Employment for Stable Economy, Oc 31 p 105 Opens New Information Office July 18 p 84 Steel Study Stepped Up, Nov 7;

Dept. of Justice:
Hamstrung in Action Agains
Labor for Restraint of Trade,
Oct 24 p 74
Indicts Vanadium Companies
Charging Monopoly, July 18;

Dept. of State:
Disposal of U. S. War Items in
European Theatre*, Nov 21;

European Theatre*, Nov 21 p 117
FLC Moves Slowly Toward Im-proved Surplus Disposal Pro-gram; Gets Only 28 Pet Retum Nov 28 p 88
Largest Reciprocal Trade Agre-ment Reflects Tariff Cuts, Nov 21 p 113
Report Shows Overseas Surplu 85 Pet Sold, Nov 21 p 116
World Commerce Charter Pro-poses Widespread Tariff and Other Changes, Oct 17 p 80

Descaling: Furnace, Lithium Co., Nov 21

74 High-Pressure Water Jets for De scaling*, July 11 p 52 Metal Cleaners, Pennsylvania Sah Mfg. Co., Dec 5 p 88 Rust Remover, Nox-Rust Chemical Corp., Dec 5 p 87 Sandblasting Machine, Leima Bros.*, Sept 19 p 67 Soda Shower for Cleaning Lowmotives*, Sept 12 p 159 Sodium Hydride Baths, Oct 10; 75

Designing for Silver Brazing With Induction Heating, by J. B Ross*, Dec 26 p 62 Despatch Oven Co.:

Forging Furnace, Nov 21 p 74 Gas-Fired Oven*, Nov 21 p 73

Detrex Corp.:
One-Dip Degreaser, Dec 5 p 88
Spray Booth Compound, Dec 5 Vapor Degreaser*, Sept 19 p 66

Detroit Tap & Tool Co.; Center Drilling Machine*, Nov2 p 77

Diamond:
Diamond Compound for Grinding
Lapping and Polishing. Eng
Equipment Co.*, Sept 19 p 68

Diamond Tool Co.: Turret Diamond Holder*, Dec 2 p 7 1

Diamond Wire & Cable Co.:

Buys Sycamore, Ill., Plant of Anaconda Wire & Cable Co.

Sept 26 p 126

Diecasting: (See Casting, Die)

Die Casting Outboard Motor Par by Herbert Chase*, Aug 15 p

Dies:
Development Must Keep Pa
With Atomic Progress, Sa
Brown, Nov 7 p 82
GM Cancels Its 1948 Prograt
Dec 12 p 86; Dec 19 p 88
Ground Thread, Jones & Lams
Co., Sept 5 p 67
Low Cost Patterns by Sol-A-D
Process for Multi-Stage Die
Aug 22 p 56
Lubricant Cuts Forging Cost
Oct 17 p 55
Material Strength Data for To
and Die Designers, Nov 28 p
Punch and Compacting Die Co
bination, Penn Carbide & All
Casting Co., Oct 3 p 58
Swinging Die Closure, Junk
Safety Appliance Co., Inc.*, 0
3 p 58
Thread Rolling—Theory and Pr
tice*, (Parts 1, 2) Dec 19 p 5
Dec 26 p 55

Dietert, Harry W., Co.: Drum Type Calculator*, Oct 17 p.74

cretary iy, Oa

Office

ov 7 ,

Agains Trade

y 18 j

tems in v 21 j

ard In al Pro-Return

Agres

Surplu 116 ter Pro-triff and

p 80

ov 21 s

for De

nia Sal

Chemi

Leima g Loco

Oct 10 p

ng With

p 74 p 73

5 p 88 Dec 5

9 p 66

, Nov 2

Grindin

g. Eng 19 p 68

, Dec 1

Plant cable Co

tor Part g 15 p

eep Pa

Prograt p 88 Lams

Sol-A-D ge Dies

g Costs

for To ov 28 p Die Cor e & Alli 58

re, Junk Inc.*, 0

and Pra c 19 p 5

Dilley Mfg. Co.: Magnetic Shield, Aug 22 p 70

Dillon, W. C., & Co., Inc.:
Cable Tester and Locator*, Aug
22 p 70
Low-Range Tester for Lighter
Raw Materials and Small Finished Items*, Dec 19 p 82
Stainless Thermometers, Dec 19 p
84 Tension Indicator*, Oct 17 p 74

Disston, Henry, & Sons, Inc.: Lathe File, Nov 7 p 69

DoAll Co.:
Gage Kit*, Sept 5 p 68
High-Speed Metal Saw*, Sept 12
p 80

Domestic Industries, Inc.: Shop Lifter, Aug 8 p 75

Douglas Aircraft Co.: Buys Surplus Plant, Nov 21 p 152

Dow Chemical Co.:
Magnesium Extras Up, Nov 21 p
109
Pension Plan, Sept 12 p 84

Dow Corning Corp.: Silicone Resin, Dec 5 p 90

Drafting:
Reproducing Drawings on Metal*,
Nov 21 p 62
Slide Rule, Charles Bruning Co.,
Inc., Oct 10 p 80

Dravo Corp.: Crane Cab Cooler, Aug 8 p 76

Drilling:
Bench Drill, Dumore Co.*, Nov 7
p 67 Bench Drill, Dumore Co.*, Nov 7 p 67
Break-proof Drill, Enesay Tool Co., Dec 26 p 71
Carbide Drills, Willey's Carbide Tool Co., Dec 26 p 72
Center Machine, Detroit Tap & Tool Co.*, Nov 28 p 77
Closely Spaced Multiple Holes*, Dec 5 p 71
Drill Chip Breaker, Ex-Cell-O Corp.*, Aug 29 p 59
Drill-Driver, Techtmann Industries*, July 25 p 64
Drillheads, Zagar Tool, Inc.*, Aug 29 p 59
Drill Holder Bushing, H. C. Clatelter Co., Aug 22 p 68

felter Co., Aug 22 p 68
Drilling and Tapping Unit, W. K.
Millholland Machinery Co.*,
Sept 12 p 78
Drillyfe Minimizes Internal Friction
in Drill Lubricants, July 11 p
45

Flexible Shaft Utility Tool, Dumore Co.*, Nov 7 p 69
Hole Cutters, Wyzenbeek & Staff, Inc.*, Dec 26 p 70
Hydraulic Spacer Replaces Drill Jigs*, Sept 26 p 73
Machine for Drilling Holes in Automobile Frames, Snyder Tool & Engineering Co.*, Nov 28 p 77

Multiple Driller, B. M. Root Co., Nov 28 p 77
Optical Centering Tool, Benton Co.*, Dec 26 p 70
Oxygen Torch Speeds Blast Holes for Ore Mining*, Dec 19 p 64
Pneumatic Drill, Aro Equipment Corp.*, Nov 7 p 68
Short Drills, Chicago-Latrobe Twist Drill Works, Nov 7 p 67
Twenty-inch Machine, Sibley Machine & Foundry Corp.*, Sept 12 p 78
Upright Drill, Cincinnati Bickford Tool Co.*, July 4 p 78

Dubpernell, George: Periodic Chart for Electroplaters, Nov 28 p 51

Dudgeon, Richard, Inc.: Tube Expanders, Oct 10 p 78

Duffy, Norman F.: Advantages of the Duplexing Proc-ess, Oct 17 p 70

Dumore Co.:

Bench Drill*, Nov 7 p 67

Flexible Shaft Utility Tool*, Nov 7 p 69

Du Pont de Nemours, E. I., & Co.:
Advances in Sodium Hydride Descaling Baths, Oct 10 p 75
Heat Resistant Plastic Insulator,
Teflon, Nov 14 p 74
Ranks Highest on War Facility
List, CPA Reports, Nov 7 p
136

E

Eakin, C. T., and Lowne, H. W., Jr. Reducing Embrittlement in Electro-plating*, Nov 21 p 69

Eastern Stainless Steel Corp.: Lifts Output to 20 Pct of Sheet Market*, Aug 15 p 98

Eastern Tool & Mfg. Co.: Wire Forms and Stampings Make Good Partners*, Oct 17 p 48

Eastman Kodak Co.: Gear Group Seeks Data on Simple Standards for Surface Quality, Nov 21 p 144 Index of Industrial Training Films Has 159 Titles on Metals, Nov 28 p. 86

New Color Film Announced; Useful in Photomicrography, Sept

ew Color Film Announced; Use-ful in Photomicrography, Sept 19 p 84 ransfax Process of Reproducing Drawings on Metal*, Nov 21 p 62

Eaton Mfg. Co.; Publishes Pictorial Automotive His-tory, July 18 p 162 Spring Lock Washers, Aug 22 p

Ebco Mfg. Co.: Water Coolers, Dec 12 p 84

Eberbach & Son Co.: Glass Tubing Cutter*, Dec 19 p 84

Eclipse Air Brush Co.: Spray Gun*, Dec 5 p 89

Eclipse Fuel Engineering Co.: Air-Draw Furnaces*, Nov 21 p 74

Econometric Institute, Inc.: Pittsburgh Industrial and Eco-nomic Study, Oct 31 p 124

Edison, Thomas A., Inc.: Magnetic Relay, Aug 1 p 70

Editorials:

ditorials:
Antiquated Practices, Aug 1 p 41
Ask Uncle Joe—He Knows, Oct
24 p 41
Bathtubs Minus Jobs, Oct 3 p 33
The Big Boss, Sept 12 p 47
British Steel Labor Reports on
Russia, Aug 29 p 31
Choice of Weapons, Oct 10 p 53
The Consumer and Machinery,
July 18 p 47
Day of Portents, Dec 12 p 55
The Flying Horse, Aug 8 p 47
For Sale—Golden Rule, Somewhat
Tarnished, Oct 31 p 33
Frightening the Frightened, Nov
28 p 39
Let's Release the Brakes (Reprint),
Aug 22 p 43
Live Longer and Know Less, Sept
26 p 53
Mama, the Price Fixer, Nov 21
p 45
Pro Bono Publico, July 4 p 49

p 45 Pro Bono Publico, July 4 p 49 Rules of Unreason, Oct 17 p 45 Seek the Truth, July 25 p 37 Self Control or Police Patrol? July 11 p 39 ne Tail Chasing Cat, Aug 15 p

Time, The Arbiter, Dec 5 p 61 To Keep Them Flying, Sept 5 p

43 was the Day After Christmas, Dec 26 p 43 he Two Critical Years, Nov 14 p Two Kinds of Productivity, Sept Two Plus Two Equals Five, Dec 19 p 55 Who Shall Plan, You or Uncle Sam? Nov 7 p 43

Edroy Products Co.: Miniature Magnifier, Dec 19 p 84

Edward Valves, Inc.: Pressure Losses in Pipe Fittings Studied*, Oct 24 p 50

Effect of Tempering on Mechanical Properties, by G. K. Manning and G. P. Krumlauf, (2 Parts) Oct 24 p 44; Oct 31 p 50

Eisen Metal Products Co.: Stainless Pen Caps Drawn With-out Annealing*, Aug 8 p 72

El Paso Gas Co.: Sues Smith Co. Over Preferential Russian Listing in Pipe Order, Oct 31 p 96

Electric Controller & Mfg. Co.: Crane Controller, Aug 8 p 76 Master Switch*, Aug 1 p 69

Electric Industrial Truck Assn.: October Bookings Climb, Dec 5 p 148

Electric Machinery Mfg. Co.: Combination Starters, Oct 31 p

Electric Metal Makers Guild, Inc.: Elects Officers, July 18 p 109

Electrical Equipment:
Appliance Output Making Rapid
Gains at Westinghouse, July 4 p

Cable Connector Tool, Burndy Engineering Co., Inc.*, Oct 10 p

Coil Testers, General Electric Co., Dec 19 p 83 Contact Springs, Gibson Electric Co.*, Oct 31 p 62 Crystal Converters, Sylvania Elec-tric Products, Inc.*, Dec 19 p 84

84
Electric Motors a Bottleneck in
Household Appliance Production*, Aug 8 p 104D
Electronic Relay, Automatic Temperature Control Co.*, Oct 31

p 62 Fluorescent Lights, Mitchell Mfg. Co., Aug 22 p 70 GE Generator and Turbine Fac-tory to Cost \$20 Million, Oct 24 p 111

GE Generator tory to Cost \$20 Million,
24 p 111
Home Appliance Field Seen As
Threatened by Excess Retail
Dealers, Nov 7 p 155
Inspection Lamp, Harmon & Co.,
July 25 p 65
Multirange Tester, Precision Apparatus, Inc.*, Oct 17 p 73
Otis Elevator Reports Escalator
Orders Up. July 4 p 150
Price Control Suspended, Sept 26
p 116

Taster, Ideal Industries,

Orders Control Suspendeu, Price Control Suspendeu, Pp 116
Resistance Tester, Ideal Industries, Inc., Oct 17 p 72
Rocket Radio With Moon-to-Earth Broadcasts Possible, Sept 19 p 148
Connections, Air-

Solderless Wire Connections, Aircraft - Marine Products, Inc.*, Aug 1 p 70
Solenoid Relay, Allen-Bradley Co.*, Oct 31 p 62
Two Way Radio Aids in Plant Efficiency, Nov 21 p 138
Vibration Resistant Lamps, Sylvania Electric Products, Inc., Aug 22 p 69

Westinghouse Reports Substantial Gains in Appliance Production, July 18 p 160 Wire Recorder, Sound Media, Dec 12 p 84

Electro Products Laboratories: Pressure Indicator*, July 18 p 76

Electrochemical Society, Inc.: Achievements Made During War-time Discussed at Convention, Nov 14 p 160

Electrodes:
Carbon and Graphite Electric Furnace Electrodes, Dec 19 p 65
Coated Electrode, Shield-O-Matic,
Developed for Automatic Welding*, Dec 5 p 67
Contact Arcwelding*, Dec 12 p 58
Dressing Tool, Edward T. Klee*,
Oct 24 p 68
Effects of Moisture in Electrode
Coatings, Sept 19 p 58
Flux-Coated Bronze Welding Rod,
Linde Air Products Co., Oct 24
p 67

p 67
Hard-Facing Arc, Lincoln Electric
Co., Oct 24 p 67
Holder, Tong Type, Tweco Products Co.*, Oct 24 p 68
Holders for Manual Welding,
Tweco Products Co., Oct 24 p
68

Tungsten, for Inert-Arc Welding*, Oct 31 p 57 Welding Rod Casting Machine*, Nov 21 p 55

Electrolized Tap Corp.: Electrolized Taps*, Aug 29 p 61

Electronic Controls, Inc.: Electronic Timer*, Aug 22 p 69

Electronic Analyzer, Weston Elec-trical Instrument Corp. , Aug 15

WAA to Speed Disposal of Sur-pluses, Aug 22 p 108

Electroplating: Aluminum and Its Alloys*, Sept 12

p 66
Control Table, Hanson-Van Winkle-Munning Co.*, Sept 19 p 68
Generators, Motor Generator Corp.*,
Dec 5 p 89
Metal Finishing Methods Discussed at Electroplaters' Convention*, Aug 8 p 68
Nickel Plating on Steel by Chemical Reduction, Aug 8 p 71
Periodic Chart for Electroplaters,
Nov 28 p 51
Plating Auto Hardware*, Sept 19
p 59
Plating Room Waste Disposal, Aug

p 59
Plating Room Waste Disposal, Aug 8 p 71
Practical Aspects, Aug 8 p 68
Purification of Rhodium Plating
Baths, Sept 12 p 69
Reducing Embrittlement*, Nov 21

Reducing Embrittlement', Nov 24, p 69
Rhodium Plating, P. R. Mallory & Co., Inc., Dec 5 p 89
Soft Water Rinse Improves Aluminum Finishes', July 11 p 58
X Ray Diffraction Studies of Electrodeposits, July 25 p 61
(See also Cleaning and Finishing)

Electro-Tech Equipment Co.: Selenium Rectifiers, Oct 31 p 62

Elgin National Watch Co.: Flexible Plug Gage Handles, Nov 7 p 70 Micrometer*, Dec 26 p 72

Elizabeth Iron Works: Torque Hook, Aug 8 p 76

Elliott Co.:
Locomotive Gas Turbines to Be
Built for Coal Group*, Sept 19
p 102

Elliott Mfg. Co.: Flexible Shafting*, Oct 31 p 62

Elwell-Parker Electric Co.: Loading and Tiering Truck, Aug 8 p 73 Ten-Ton Truck, Aug 8 p 73

Emsco Refractories Co.: FTC Dismisses Case, Aug 29 p

Enameling: (See Cleaning and Finishing)

Enco Mig. Co.: Bed Turret*, July 4 p 80

Enesay Tool Co.: Break-Proof Drill, Dec 26 p 71

Engineering Foundation: Council to Accredit Curricula of Technical Institutes, Nov 28 p Officers Elected, Nov 7 p 152

Alco to Begin Mass Production of Diesel Electric Locomotives*, Sept 19 p 99
American Locomotive Co. to Complete 75,000 Car, Aug 15 p 148
Buick Modernizes Cylinder Bore Production*, Nov 21 p 65
Diesel Locomotive Adaptable for Freight or Passenger Service Built by GM, Oct 24 p 102; Oct 31 p 96
Engine-Mount Tester, Link Engineering Co.*, Aug 15 p 65
Improvements Planned in Diesel Design to Meet Threat of Gas Turbine*, July 4 p 144
Locomotive Gas Turbines Ordered by Coal Group, Sept 19 p 102
Piston Skirts Produced by Taper Form Grinding*, Oct 17 p 56
Production of Ignition Radio Shields*, Aug 29 p 56

Turbochargers Get First Civilian Use on Boeings. Aug 22 p 138 Water-Jet-Propelled Boats Devel-oped by Gray Marine Motor Co., Oct 17 p 141 (See also Turbines)

Engis Equipment Co.: Diamond Compound*, Sept 19 p 68

ank Syndicate Grants Large Credit to Parisian Firm, Oct 10

Credit to Parisian Firm, Oct 10 p 122
British Aluminum Sales Involve Loss, Sept 5 p 86
British Get Machinery as War Reparations, Aug 8 p 92
Builds Factories for Rent; Depressed Areas to Benefit, July 4 p 152
Coal Board Prepares to Take British Mines, Aug 1 p 86
Coal Order Revoked, Aug 15 p 140
Coal Supply Below Safety Margin.

Coal Supply Below Safety Margin, Aug 22 p 145 Copper Consumption Down, First Half 1946, Aug 15 p 84 Copper, Lead and Zinc Ceilings Up in U.K., July 11 p 112 Employment, Hours and Wages in British Industry, Jan 1946, Aug 22 p 95

Employment, Hours and Wages in British Industry, Jan 1946, Aug 22 p 95
Export Policy and Goals Explained, Aug 15 p 148
Exports, 1st and 2nd Quarter, Aug 8 p 104C
Government Plans to Name Permanent Control Board for Steel Industry, Aug 29 p 102
Iron and Steel Exports, 1938, 1945, 1st and 2nd Quarters 1946, Aug 22 p 100
Light Alloy Controls Ended, Aug 15 p 114
Prefabricated Housing Combines Steel and Clay*, Sept 5 p 105
Progress of Liquid Steel Pyrometry*, July 25 p 52
Settles Coal Compensation Figure, Aug 22 p 151
Shortages Slow Steel Output, July 25 p 82
Steel Board Selection Delayed,

Shortages Slow Steel Output, July 25 p 82
Steel Board Selection Delayed, Aug 8 p 90
Steel Nationalization Plans Softened, Aug 29 p 87
Steel, Pig Iron Prices Increased, Aug 29 p 87
Steel Prices Up, Aug 15 p 93

Erickson Steel Co.: Expanding Mandrel, July 25 p 64

Ess Instrument Co.:
Operational Recorder*, Dec 19 p

Europe: Coal Mines Start Recovery; World Shortage Hits Imports, Oct 3 p 74

Ex-Cell-O Corp.: Drill Chip Breaker', Aug 29 p 59

Exports and Imports:

xports and Imports:
American Exporters Flood Belgium With Shoddy Consumer Goods, July 4 p 94
Auto Exports From End of War Until June, 1946, Dec 19 p 109
Britain's Exports 1st and 2nd Quarters 1946, Aug 8 p 104C
British Iron and Steel Exports Continue to Show Upward Trend, Aug 22 p 100

Continue to Show Upward Trend, Aug 22 p 100 British Iron and Steel Exports, 1938, 1945, 1st and 2nd Quar-ters 1946, Aug 22 p 100 British Steel Exports to Decline in Last Quarter, Oct 17 p 90 Building Items Placed Under Ex-port Control, Aug 22 p 102 Canada Acts to Reimburse Metal Producers for Exports at World Prices, Nov 28 p 156 Canadian Tariff Changes, July 18 p 113

Canadian Tariff Changes, July 18 p 113
Census Bureau Will Compile Data in N. Y., July 25 p 134
CPA Watches UNRRA Machinery Schedule, Sept 5 p 145
Coke Exports, 1940-45, Aug 29 p 120
Concrete Bay Exports Expeed Pro-

Concrete Bar Exports Exceed Pre-war Rates, Nov 14 p 108 Copper Imports and Domestic Mine Output Drop Sharply in 1945, Aug 8 p 145 Copper, Nickel, Tin Imports Rise in October, Dec 26 p 115

Decontrol Export Sales of Several Metals and Minerals, Oct 31 p

Metals and Minerals, Oct 31 p
101
Dollar Parity Seen as Slight Boon
to Canadian Steel Purchasers,
July 25 p 101
Exporters Get Leeway in Seeking
Benefits in Trade Agreements,
Dec 26 p 101
Farm Machinery Exports During
August, Oct 17 p 181
Foreign Freight Car Orders Must
Take Back Seat, CPA Rules,
Dec 26 p 88
Foreign Funds for Purchase of
American Steel Seen Unlimited,
July 11 p 95
40 Items Removed from Export
License Control, Dec 19 p 120
France to Boost Imports to \$1.5
Billion in Year, Sept 12 p 134
French Aluminum Exports for 1946
Below Prewar Period, Aug 22
p 101
French Imports of Coal in June
Decline Sharply, Aug 29 p 78

p 101
French Imports of Coal in June
Decline Sharply, Aug 29 p 78
French Protest Export of Cars to
U. S., Sept 12 p 136
Imported Goods to Have No
Change in Ceilings, Sept 26 p
162
Imports Repet National Exports

India Seen as Future Market for U. S. Machine Tools, Oct 17 p 115

India Seen as Future Market for U. S. Machine Tools, Oct 17 p 110

Italian Communications of the Communication of the Communication

U. S. Machine Tools, Oct 17 p
110
Italian Government Permits Customs-Free Importation of Ferrous Materials, Oct 24 p 140
Largest Reciprocal Trade Agreement Reflects Tariff Cuts, Nov
21 p 113
Lead Imports During July Will
Reach 8700 Tous, July 4 p 160
Lead Shortaye is Attributed to
British-U. S. Importation Agreement, Sept 26 p 117
License List Adds More Iron and
Steel Products as of Sept 11,
Oct 3 p 89
Licensing Plan Seen as No Improvement by Exporters, Oct 3
p 88
Machine Tool Exports, Sept-Dec

p 88 achine Tool Exports, Sept-Dec 1945, Jan-June 1946, Aug 8 p

1945, Jan-June 1946, Aug 8 p
105
OPA Changes Export Rules, Aug
22 p 111
OPA Revises Export Price Rules;
Plans Meeting to Answer Questions, Aug 29 p 94
Packaged Manufacturing Plants
for Foreign Use Planned on
West Coast, Aug 22 p 141
Paraguayan Import Duties Drop
Sharply on American-Made Metal
Items Through Trade Agreement. Oct 3 p 89
Percentage Limitation May Ruin
CPA's New Export Priorities
Program, Aug 1 p 102
Philippine Republic Excellent Market for American Made Products, Aug 1 p 80
Premiums to Continue on Nonferrous Ore Imports, Aug 15 p
114
Reciprocal Tariff Agreements De-

ferrous Ore Imports, Aug 15 p
114
Reciprocal Tariff Agreements Develop Growing Hostility by
Industry, Dec 26 p 78
Right and Wrong Way to Carry
on Trade With S.A. Markets
Cited by David Linquist, July
25 p 145
State and Commerce Depts. Agree
on Plan to Break Down Trade
Barriers, Dec 5 p 96
Steel Exports Hold Own in Ratio
to Production; Quality Steels in
Fore, July 4 p 116
Steel Products Get New Export
Price Schedule, Dec 26 p 101
Swiss Receipts of U. S. Cars First
Half of 1946, Nov 7 p 95
Timplate Export Allocation. 3rd
and 4th Quarter Quotas, Sept 5
p 97

p 97 Tinplate Exports of 55,000 Tons to Southern Countries Approved by CPA, Oct 10 p 112 U. K. Copper Imports Up, Aug 15

Tinprato to Southern by CPA. Oct 10 p 1...
by CPA. Oct 10 p 1...
p 114
U. K. Copper Imports Up, Aug. p 114
U. K. Exports for May Show Increase Over 1938, July 4 p 118
U. S. Exports of Domestic Industrial Products Cumulative Through June 1945-46, Sept 12
p 158
poorts of Machine Tools
22 p 148
of Iron

p 158 S. Exports of Machine Tools, 1918-1945, Aug 22 p 148 S. Importing Quantities of Iron, Copper and Lead, Oct 3 p 60

U.S. Iron and Steel Exports De-cline, Machinery and Copper Gain, First Six Months, Sept 12 p 158 WAA Adds New Export Di-visions, July 11 p 96

Extruded Powder Metal Weld Rods, by F. C. Kelley a F. E. Fisher*, Dec 19 p 68 Weldin

Extrusion:
Casting Aluminum Billets for Extruding*, Dec 26 p 52
Cressona Plant Sale to Alcoa Approved. Sept 12 p 113
Extruded Powder Metal Welding Rods*, Dec 19 p 68
Factory-Built Houses Using Half Aluminum Sheet and Extrusions Seen, Oct 24 p 106

F

Fair, R. B.: How to Select the Correct Grind-ing Wheel*, (2 Parts) Oct 31 p 41; Nov 7 p 64

Fansteel Metallurgical Corp.: Tantung—What It Is. How to Use It*, Nov 14 p 76

Farley, R. W., and McCurdy, R. J.: lectric Furnace in Production of Openhearth Type Steels, Dec

Farm Equipment:
Canada Increases Imported Machinery, Iuly 4 p 146
Canadian Implement Output Up
7.3 Pct. Sept 5 p 154
Chinese Farm Implement Goal
Set at \$21 Million by UNRRA,
Oct 31 p 104
Electronic Plough*, Sept 12 p
111

111 Insures Dollar Benefits to Canadian Buvers, Oct 3 p 62 Output Wav, July 11 p 107; July, August, Oct 17 p 181; September, Nov 21 p 152

Fasteners:

Asteners:
Aluminum Nail Tests Win Approval in Canada, Nov 21 p
120
Bolt Price Increase Now Totals
12 Pct Over 1941 Ceilings,
July 18 p 111A
Canada Freezes Nails for Low
Cost Housing, Aug 1 p 107
Canadian Strike Will Intensify
Nail Famine, Sept 26 p 118
Giant Nut Former Announced by
Waterbury Farrell*, Dec 19 p
80

Housing-Type Nails Subject to 50 Pct "Set-Aside," CPA Orders, Nov 14 p 143 Military Releases Nails, July 25 p

108
Nail Shipments, September, Nov
28 p 107
Premium Payment for Wire Nails
Sought, Sept 26 p 112; Oct 3
p 62; Oct 10 p 108; Oct 31 p
125

p b 2; Oct 10 p 108; Oct 31 p 125 Socket Screws, Parker-Kalon Corp.*, Aug 22 p 68 Speed Nuts, Tinnerman Products, Inc.*, Oct 10 p 79 Surplus Nails for Food Boxes, July 11 p 104 Torque Values for Standard AN Bolts and Nuts. Oct 10 p 59 Use of HH and HHH Ratings Explained to Nail Distributors, Aug 22 p 102 Wire Nail Shipments, August, September, Nov 7 p 95

Faust, C. L.: Practical Aspects of Electroplat-ing*, Aug 8 p 68

Fauver, J. N., Co.: Industrial Hose, Aug 22 p 67

Fearless Tool Co.: Rotary Broaches*, Dec 26 p 71 Tool Bit*, Aug 29 p 60

Federal Electric Products Co.: Magnetic Motor Starters, Aug 1 p 68

Federal Power Commission: Electrical Power Used by U.S. In-dustries Increases 81 Pct Over 1939, Nov 28 p 113

Federal Security Agency: Report Shows 1946 Employment Trend, Oct 24 p 99

Flu

F

For

Federal Telephone & Radio Corp.: Industrial Truck Battery Charger*, Dec 12 p 81

Federal Trade Commission:
Cement Basing Point Decision to
Be Taken to Supreme Court,
Oct 10 p 86; Oct 31 p 98
Metal Lath Producers Deny
Charge That Industry
Prices, Sept 26 p 90
Stand on Steel Basing Points
Seen Weakened by Cement
Case, Oct 3 p 85

Fellows Gear Shaper Co.: Lead Measuring Instrument*, Nov 28 p 81

Fen Machine Co.: Automatic Wrench*, Dec 26 p 69 Crucible Furnace*, Sept 26 p 81

Ferguson, H. K., Co.: Low Cost Steel Frame Factory Developed, Nov 21 p 154

Ferroalloys: Alsifer Price Increased, Nov 14 p 205

Canadian Production, Jan-June 1946, Aug 29 p 100; August, Nov 14 p 204; September, Nov 21 p 112: October, Dec 26 p

Canadian Sales for 1944 Drop 5
Pct; Output Also Decreases,
Oct 3 p 94
Ohio Ferro-Alloys Corp. Announces Price Increase of Simanal, Oct 3 p 66
Prices Raised, Dec 19 p 128
Spiegeleisen Prices Advanced \$4
Per Ton, Nov 21 p 124

Ferromanganese: Production. Second Quarter, 1946, Sept 26 p 168

Film, Color:

New Color Film, Useful in Photomicrography. Eastman Kodak
Co., Sept 19, p 84

Films:
Aluminum Brazing and Welding
Films Added by Bureau of
Mines, Dec 26 p 113
Index of Industrial Training Films
Has 159 Titles on Metals, Nov

28 p 86 Steel and Nickel Films Soon to Be Released by Bureau of Mines, Nov 28 p 142

Findlater, S.: Stretch-Reducing Seamless Tubing, Dec 12 p 62

Finishes: (See Cleaning and Finishing)

Finishes for Plastics, by H. W. Dell*, Dec 26 p 46

Finland: Recovery Spurred by Energetic Procurement of U.S. Surplus Goods, Nov 28 p 137

Fischer & Porter Co.: Flow Rate Instrument*, Oct 17 p 73

Fisher, F. E., and Kelley, F. C.: Extruded Powder Metal Welding Rods*, Dec 19 p 68

Fisher Body Craftsman's Guild: To Offer Cash Awards to Youth Nov 14 p 174

Fission at Bikini: (2) Bomb by Manhattan, by T. W. Lippert*, July 18 p 50

Fitterer, G. R.: Acid Electric Slags, Dec 19 p 67

Flame Cutting and Welding in Bull-dozer Manufacture, by H. H. Washbond and O. F. Wilkin-son*, Sept 12 p 56

Flame Cutting Stainless Steel, by G. E. Bellew*, July 11 p 42

Flame Sprayed Plastics, by M. J. Gurdin*, Aug 22 p 64

Fluoroscopy: Case for 100 Pct X Ray Inspec-tion of Aircraft Castings*, Oct 10 p 56

Flux: Aluminum, A. K. Mauk, Oct 24 p 67 Flame Cutting Stainless Steel by Flux Injection*, July 11 p 42

ment

orp.:

n to

Deny

oints ment

Nov

p 69 p 81

ctory

14 p

June gust, Nov 26 p

op 5 cases,

1 \$4

1946.

hoto-lodak

elding u of

Films

bing.

W.

rgetic irplus

ct 17

elding

p 67

Bull-I. H.

d, by

M. J.

nspec-

ild: ouths. b by pert*, Follansbee Steel Corp.:

Merges with Sheet Metal Specialty
Co., July 4 p 115

Plans High Silicon Sheet Output,
July 4 p 119

Ford Motor Co.:
Changes in Engineering Division
Announced, Oct 24 p 126
Improved Conditions in Foundries
Under Way, July 25 p 153
Labor-Management Blueprint
Offered But Little Chance for
Guaranteed Annual Wage Seen,
Sept 26 p 84
Labor Trouble Over Sodium
Fluoride Stalemated, But Issues May Be Settled Without
a Stoppage, Nov 14 p 102
Losses Through September Are
Set at \$51,600,000, Nov 21 p
80

OPA Allows Advance of 6 Pct on Automobile Retail Ceiling,

OPA Allows Advance of 0 Feet on Automobile Retail Ceiling, Sept 26 p 86 Openhearth Stoppage, Over So-dium Fluoride Fumes, Costs 17,000 Tons of Steel, Oct 24 p 70; Nov 7 p 106 Plans \$10 Million Foundry Im-provement, Aug 8 p 150 Production Schedules Cut, Nov 7 p 72

Regional Managers Hold Sales Talks, Oct 31 p 66 Revises Vacation Rules, Aug 29 p 91 Roberge Appointed Foreign Man-ager, Oct 3 p 136

Foreign Liquidation Commission: (See Dept. of State)

Foreign Trade:
Austria Lifted from Group E Export Restriction List, Aug 29 p

Conference in London to Consider Code for World Commerce; Widespread Tariff Changes Proposed, Oct 17 p 80; Dec 5 p 96

Export Tips Published in Commerce Dept. Report, Sept 19 p

merce Dept. Report, Sept 19 p
Exporters Get Leeway in Seeking Benefits in Trade Agreements, Dec 26 p 101
International Conference on Trade and Employment Preparatory Committee Meets to Draft Proposal for World Trade Agreement, Oct 31 p 76, 104; Dec 19 p 160
Largest Reciprocal Trade Agreement Reflects Tariff Cuts, Nov 21 p 113
N. Y. Zone Makes Prewar Location Shift, Oct 31 p 70
Reciprocal Tariff Agreements Develop Growing Hostility by Industry, Dec 26 p 78
Trade Agreement Drops Paraguayan Import Duties on American-Made Metal Items, Oct 3 p 89
WAA Rules on Foreign Sales of Surplus Seen as Result of Public Reactions, Sept 26 p

Forging:

Bar-End Forge Furnace, Selas

Corp. of America*, Nov 21 p

Corp. of America*, Nov 21 p

Bethlehem Axle Plant Modernized*, Oct 10 p 60

Costs Cut by Improved Die Lubricant*, Oct 17 p 55

Detroit Shops Begin to Feel Coal Strike Effects, Dec 5 p 120

Furnace, Despatch Oven Co., Nov 21 p 74

High-Alloy Rounds With V-Type Dies*, Aug 1 p 44

Kropp Leases Aircraft Forge Plant, July 4 p 157

Massive Forgings for Pulp Mill Machinery*, Sept 26 p 69

Practice in Wartime Germany*, Aug 1 p 55

Precision Forging of High Temperature Alloys for Gas Turbines*, Nov 28 p 42

Steel Forgings Shipments Climb During July, Sept 26 p 142

(See also Nonferrous Metals, Forming and Shaping)

Forging Costs Cut by Improved Die Lubricant, by L. R. Pis-toles*, Oct 17 p 55

Forging High-Alloy Rounds With V-Type Dies, by Elmer Ghrist*, Aug 1 p 44

Forging Practice in Wartime Germany, by C. W. Heppenstall, Jr. *, Aug 1 p 55

Forming and Bending:
Bar Bending Machine, Klingelhofer Machine Tool Co.*, Oct
3 p 57

3 p 57 Bending Machine, Leonard Pre-cision Products Co.*, Oct 3 p 57

57 Brake, O'Neil-Irwin Mig. Co., Oct 3 p 57 New Process Weaves Metals, Aug 15 p 64

Foster, William Chapman: Appointed Under Secretary of Commerce, Dec 5 p 126

oundry:
Britain to Recruit Labor for Iron
Foundries, Nov 14 p 204
Case for 100 Pct X Ray Inspection of Aircraft Castings*, Oct
10 p 56
Casting Aluminum Billets for

tion of Aircraft Castings*, Oct 10 p 56
Casting Aluminum Billets for Extruding*, Dec 26 p 52
Casting Tuyeres of Aluminum for Blast Furnace Practice*, Oct 10 p 68
Controller Named for British Zone of Germany, Sept 12 p 157
Core Grinder, D. J. Murray Mfg. Co., Sept 26 p 82
Capola Tuyeres; Factors Affecting Shapes and Sizes, Dec 26 p 50
Dept. of Justice Disproves Ordnance Foundry Sale of American Steel Foundries, July 18 p 106
Electronic Frequency Converter for Melting Units*, Nov 7 p 57
Ford Plans \$10 Million Factors

Ford Plans \$10 Million Improvement, Aug 8 p 150
Gagger Bars, Joseph T, Ryerson & Sons, Inc.*, Sept 26 p 82
General Malleable Corp. Acquired by International Harvester Co., July 18 p 159
Grinding Wheel Selection*, (2
Parts) Oct 31 p 41
Hot-Blast Cupola Design*, Aug 29 p 44
Improved Conditions Now Under Way at Ford Motor, July 25 p 153
Italian Workers Will Comments

Improved Conditions Now Under Way at Ford Motor, July 25 p 153

Italian Workers Will Go to Britain to Relieve Labor Scarcity, Dec 19 p 156

Mechanical Pouring Unit Handles 11 Tons Per Hour*, Dec 5 p 77

Metal Dowel, Kindt-Collins Co.*, Sept 26 p 82

New Binders Improve Core Performance*, Dec 26 p 66

Operations Tighten Auto Production Lines, Sept 19 p 72

Patternmakers to Ask for \$2.75

Per Hr Minimum Wage Scale, Dec 5 p 92

Pittsburgh Non-Certified Industries Face Layoffs Due to Iron Shortages, Sept 26 p 110

Portable Mullor, Beardsley & Piper Co.*, Sept 26 p 82

Practical Method of Specifying Cast Irons, Oct 31 p 46

Resinous Scalants for Porous Castings, Nov 14 p 90

Sand Conditioner, Royer Foundry & Machine Co.*, Sept 26 p 82

Selecting the Correct Grinding Wheel*, (2 Parts) Oct 31 p 41: Nov 7 p 64

Selecting the Correct Type of Cast Iron*, (2 Parts) Oct 17 p 64; Oct 24 p 58

Unions Announce Wage Demands, Nov 28 p 84

Four Wheel Drive Auto Co.: Earnings for Year Ended June 30, Sept 26 p 122

France:
Aluminum Output Passes 1938
June Rate, Aug 22 p 101
Blast Furnaces and Their Production, 1938, by Region and Company, Oct 10 p 120
Coal Compromise Made by Belgium and France, Oct 31 p 78
Cucles Tuyeres: Feature Affects

Cupola Tuyeres; Factors Affect-ing Shapes and Sizes, Dec 26 p 50

Disposal Firm Established Temporarily, Oct 10 p 118
Export of Cars to U.S. Raises
Outery, Sept 12 p 136
Factory Workers Get 18 Pet
Pay Raise, Aug 22 p 136
Imports to Be Boosted to \$1.5
Billion in Year, Sept 12 p 134
Iron and Steel Production in the
Saar, 1934, 1937, 1944, Sept
5 p 146
Iron Ore Production and Exports, July, Oct 10 p 117
Iron Ore Resources, by Region,
Oct 10 p 120
Labor Shortages Constitute Serious Handicap in Progress
Toward Prewar Normaley, Nov
21 p 90
Monnet Plan for Modernization
of Industry Specifies Individual
Goals for Basic Industries, Dec
19 p 98
Ore Mines Concerned Over

re Mines Concerned Over Swedish Efforts to Replace Former German Markets, July 25 p 80

Former German Markess, 25 p 86
Pig Iron Prices Increased About
40 Pct. Oct 10 p 117
Price Increases Granted to Cover
Wage Costs, Oct 10 p 121
Saar Coal Mines Average 24,000
Tons Daily, Sept 5 p 146
Steel Equipment Modernization
Included in 5-Yr Plan, Nov 21

p 119 Steel

p 119 Steel Finance Company, G.I.S., to Aid Rebuilding of Damaged War Plants, Oct 10 p 116 Steel Industry, Sept 26 p 96 Steel Industry Nationalization Sought by Communists, Oct 10

Steel Industry Nationalization
Sought by Communists, Oct 10
p 120
Steel Industry Shows Dissatisfaction Over Metal Price Increases, Oct 24 p 105
Steel Industry to Be Controlled
by Trade Association, Chambre
Syndicale de La Siderurgie, Oct
10 p 116
Steel Mills Lobbying for Possession of Continuous Strip Mills,
July 25 p 80
Steel Output Shows Advance During July, Sept 12 p 159;
August, Oct 10 p 117
Steel Price Complaints Made,
Nov 14 p 203
Steel Prices Increased 36 Pct,
Oct 10 p 117
Steel Production One-third Below
Demand, July 25 p 80
Steelworks Begin Unfolding Construction Plans, Nov 14 p 116
Two Firms Pool Efforts to Build
66-In. Continuous Strip Mill,
Nov 14 p 116
Vertical Normalizing Furnace for
Strip Steel, Dec 12 p 80

Frankford Arsenal: Special Slide Rule Solves Gage Design Problems*, Oct 24 p 52

Freedom-Valvoline Oil Co.: Fingerprint Remover, Sept 19 p

Frick, H. C., Co.: Robena Mine Opened to Supplement Coking Coal Reserves, Sept 19 p 98

Fuel:

Bunker Oil Shotrage May Require
Changes in Eastern Mills' Fuel,
Aug 8 p 106
New Process, Using Oxygen, Developed to Cut Melting Time of
Pig Iron, Scrap, Sept 26 p 123
Oxygen for Industrial Uses, Oct
10 p 74
Oxygen in Furnaces May Revolutionize Steelmaking, Nov 21 p
104
Oxygen in Steelmaking, Nov 28

Oxygen in Steelmaking, Nov 28 p 47 Studied With High Speed Camera, Dec 5 p 86

Funk, Edward J., Jr., and Von Ludwig, Davidlee: A Critical Survey of Controlled Atmospheres, (3 Parts) Sept 19 p 42; Sept 26 p 74; Oct 3 p 50

Furnaces, Blast: Aluminum Tuyeres*, Oct 10 p

Canadian Capacity and Produc-tion, 1936-1946, Nov 14 p 138 Canadian Companies, Location, Number of Stacks, Capacity, Nov 14 p 138

CPA Again Looks to Possibility of Subsidizing Marginal Blast Furnaces, Aug 29 p 93 Cupola Tuyeres; Factors Affect-ing Shapes and Sizes, Dec 26 p 50

ing Shapes and Sizes, Dec 26
p 50
French Furnaces and Their Production, 1938, by Region and
Company, Oct 10 p 120
Furnaces for Pig Iron Increases
Under NHA Bonus Plan, Sept
12 p 110
Hot-Blast Cupola Design*, Aug
29 p 44
Oxygen Enrichment of Blast
Furnace Air, Oct 10 p 74
Oxygen May Revolutionize Steelmaking, Nov 21 p 104
Pig Iron Production and Capacity
by Districts, May, July 4, p
115; June, Aug 1 p 106; July,
Aug 29 p 94; August, Oct 3
p 103; September, Oct 31 p 93;
October, Nov 28 p 116
WAA Pig Iron Plan Rushed, Aug
22 p 102

Furnaces, Electric: Application in Production of Openhearth Type Steels, Dec 19 p

Are Rocking Furnace, Kuhlman Electric Co.*, Sept 26 p 81
Carbon and Graphite Electrodes, Dec 19 p 65
Construction Outlook Reported Indefinite, July 4 p 153
Melting Furnace for Aluminum Alloys, Ajax Engineering Corp.*, Sept 26 p 81
Melting Rimmed Steel, Dec 19 p 66

Melting Rimmed Steel in the Electric Arc Furnace*, Sept 26 p 62 Power Factor v. Input in Elec-tric Furnace Melting, Oct 17 p 63

p 63
Preparation of Raw Materials for Fast Melting in Arc Furnace, Dec 19 p 66
Quality Factors Weighed by Steelmakers*. Dec 19 p 65
Renewed Interest Shown in Iron Production, Dec 19 p 94
Small Parts Furnace. Thermo Electric Mfg. Co.*, Nov 21 p
75

Total in U.S., Jan. 1946, Dec 19 p 65

Furnaces, Heat Treating: Air-Draw Furnaces, Eclipse Fuel Engineering Co.*, Nov 21 p

Bar-End Forge Furnace, Selas Corp. of America^o, Nov 21 p 74 Batch Type Furnace, Bellevue In-dustrial Furnace Co.^o, Nov 21 p

dustrial Furnace Co.*, Nov 21 p
74
Carburizing Furnaces, General
Electric Co.*, Nov 21 p
73
Descaling Furnace, Lithium Co.,
Nov 21 p
74
Electric Furnace, Lithium Co.,
Nov 21 p
75
Electric Kiln, Pereny Equipment
Co.*, Nov 21 p
75
Electric Kiln, Pereny Equipment
Co.*, Nov 21 p
75
Forging Furnace, Despatch Oven
Co., Nov 21 p
74
Gas-Fired Over, Despatch Oven
Co.*, Nov 21 p
73
Induction Furnace Heats
Slugs per H
7** Sept 12 p
75
Induction Heating Generator, Induction Heating Generator, Induction Heating Corp.*, Nov 21
p
74
Oven Makers Gave Heat Treaters Thermal Flexibility, Says
Gehnrich, Oct 24 p
108
Pull-Drawer Oven, Genrich Oven
Div., W. S. Rockwell Co.*, Nov
21 p
73
Vertical Normalizing Furnace for
Strip Steel, Dec 12 p
80
Furnaces, Industrial:

Furnaces, Industrial:
Rust to Design Three Slab
Furnaces for Bethlehem Steel
Co., Aug 29 p 105

Furnaces, Melting:

Acid Openhearth Steel Output,
1945, July 11 p 76

Arc Rocking Electric Furnace,
Kuhlman Electric Co.*, Sept
26 p 81

Crucible Furnace, Fen Machine
Co.*, Sept 26 p 81

Electric Furnace for Aluminum
Alloys*, Ajax Engineering
Corp.*, Sept 26 p 81

Electronic Frequency
for Melting Units*, Nov 7 p
57

Ellipsoid Melting Furnace*, Sept 29 p 79
Ford Stoppage, Over Sodium Fluoride Fumes, Costs 17,000
Tons of Steel, Oct 24 p 70;
Nov 7 p 106
Induction Melting as Applied to the Manufacture of High Alloy Casting, Dec 19 p 6?
New Canadian Process Developed to Cut Melting Time of Pig Iron, Scrap, Sept 26 p 123
Oxygen May Revolutionize Steelmaking, Nov 21 p 104
Preparation of Raw Materials for Fast Melting in Electric Arc Furnace, Dec 19 p 66
Refractory Economy v. Combustion, Nov 21 p 64
Rimmed Steel Melting in the Electric Arc Furnace*, Sept 26 p 62
Swedish High Frequency Furnace for Cast Iron*, Dec 5 p 86
Vacuum Melting in Germany*, Dec 12 p 64

G

Gallmeyer & Livingston Co.: Tool Grinder*, July 4 p 78

Gallup Polls:
American People Would Prefer a
Strong UN, Aug 29 p 95
Democratic Party Reaches Lowest
Point in 16 Yr, Oct 24 p 101
Democrats Lose Support of Independent Voters, Aug 8 p 107
Ex GI's Have No Gripe About
Government Treatment, Oct 3
p 91

G.O.P. More Confident of Vic-Than Democrats, Sept 19

tory 101 p 101
Increasing Numbers Prefer GOP
to Handle Strikes, Oct 31 p
95

Majority Names Foreign Policy No. 1 Campaign Issue, Oct 10 p 113

p 113
Majority View Mounting Prices as Inevitable, Aug 22 p 103
Many Believe Prices Will Drop in Next Six Months, Dec 19

erwhelming Majority Approves European Occupation, Sept 26

p 117
Overwhelming Majority Approves
European Occupation, Sept 26
Polls Shows Toledo Labor Plan
Is Popular, Nov 21 p 109
Postwar Discontentment Found in
U.S. and Britain, Nov 14 p 135
Present Indications Point to Republican Control, Nov 7 p 103
Presidential Popularity Declines in
Past Year, July 18 p 107
Public Calls for Removal of Price
Control on Meat, Oct 17 p 107
Public Favors Law to Prohibit
Strikes and Lockouts, Dec 5 p
121
Public in Survey Votes Against
Destroying Atom Bombs, Dec
26 p 105
Public Looks to Democrats to
Keep Wages Up, July 11 p
101
Public Names Inflation Prime

101
Public Names Inflation Prime
Problem Facing Nation, Aug
15 p 101
Public Opinion Now Favors
G.O.P. Labor Policy, July 4

Public Presents Pessimistic View-point on Economic Trends, Sept 12 p 115

2 p 115

Republican Party Gains Added
Strength, July 25 p 97

State Dept. Should Increase Proselytizing Functions, Sept 5 p

103 Strike Control Listed as First Problem for New Congress, Dec 12 p 115 Sympathies of French Public Are Sharply Divided, Nov 28 p 115 World Opinion of United Nations Reaches New Low, Aug 1 p 103

Galvanizing:
(See Cleaning and Finishing)

Garside, J. E.:

Quick Methods for Identifying

Metals, Oct 17 p 58

Gasflux Co.: Air Lines Dryer*, Aug 22 p 69

Gayler, M. L. V.: Processing 4 Pct High, Purity Aluminum Alloy, Oct 31 p 45

Gear Manufacture:
Automatic Broaching Speeds Auto
Parts Output*, Oct 10 p 66
Lead Comparators, Michigan Tool
Co.*, Dec 26 p 70
Sales May, July 4 p 109; June,
Aug 8 p 101; July, Sept 5 p
95; August, Oct 10 p 105; September, Nov 7 p 95; October,
Dec 5 p 115
Surface Quality Standards Data
Sought by Gear Group, Nov 21
p 144

p 144

Gebhardt, H. L.:

New Binders Improve Core Performance*, Dec 26 p 66

Geist, K. R., and Hambley, W. A.:
Practical Methods of Selecting the
Correct Type of Cast Iron*, (2
Parts) Oct 17 p 64; Oct 24 p
58

58 ractical Method of Specifying Cast Irons, Oct 31 p 46

General Control Co.: Nine-Position Switch*, Aug 1 p

General Electric Co.:
Appliance Wire, Aug 1 p 70
Buys Nonintegrated Steel Mill to
Assure Supply of Steel Parts,
Nov 7 p 108
Carburizing Furnaces*, Nov 21 p

73
Chart Viewer*, Dec 19 p 84
Coil Tester, Aug 15 p 65
Coil Testers, Dec 19 p 83
Contracts for One Third of Its
Tungsten, Sept 26 p 120
Current Transformers*, Oct 31 p

Current Transformers', Oct 31 p
61
Dewpoint Recorder, Oct 17 p 73
Dielectric Heater*, Oct 3 p 58
Elongation Testers*, July 18 p 75
Heat Treating Atmosphere Producer*, Nov 21 p 48
Heavy Alloy Developed in England Aids Machine Design*,
Sept 19 p 62
Home and Farm Arc Welder*,
Oct 24 p 66
Inert-Arc Welding*, Oct 31 p 57
Ion Gage*, Aug 15 p 66
Mill Type Motor Standards, Oct
10 p 73
New Mill Motors Feature Higher

Mill Type Motor Standards, Oct 10 p 73
New Mill Motors Feature Higher Ratings*, Oct 31 p 55, 59
New Process, Multi-Weaving, Weaves Metals, Aug 15 p 64
New Turbine Factory to Cost \$20
Million, Oct 24 p 111
Oil-Fuse Cutouts*, Aug 1 p 69
Portable Rectifiers*, Oct 31 p 61
Revamps Special Products Division, Aug 8 p 136
Selfbalancing Potentiometer, Autopot*, Dec 19 p 83
Temperature Recorder*, July 18 p
76

To Operate Atomic Lab in Schenetady, Nov 14 p 131
Twin-Unit Arc Welder*, Oct 24 p

Voltage Regulators*, Oct 31 p 60 X-Ray Photometer, Oct 17 p 74

General Electric X-Ray Corp.: 2,000,000-Volt X Ray Bought by Babcock & Wilcox for Welds, Aug 29 p 99

General Engineering Co.: Boring and Facing Machine*, July 4 p 79

General Motors Corp.:

Buick Leases Huge Tank Arsenal
for Warehouse, Oct 17 p 78

Buick Modernizes Cylinder Bore
Production*, Nov 21 p 65

Buick Output Higher in September, Oct 24 p 105

Car Prices Raised by \$100 Across
The Board, Nov 14 p 131

Chevrolet New Car Sales; Analysis Through August, Oct 31 p
66

hevrolet Says Public Wrong About New Car Sales, Oct 31

p 66
Die Program for 1948 Cancelled,
Dec 12 p 86; Dec 19 p 88
Earnings 2nd Quarter, Aug 8 p
105; First 9 Months, Dec 26 p

Holds Press Conference to Explain Low Automotive Output, Sept 12 p 82 Leads in Employing World War II Veterans, Dec 19 p 88 Manufacture of Chevrolet Light Car Halted, Sept 19 p 72

New Diesel Adaptable for Freight or Passenger Service*, Oct 24 p 102; Oct 31 p 96 New Production Peak Hit, Dec 5 p 92

Plating Auto Hardware*, Sept 19

Polishing and Buffing Die Cast Auto Hardware*, Sept 5 p 58 Ternstedt Plant Opened at Colum-bus, Ohio, Dec 12 p 86 Unit-Cooled Motors*, Oct 31 p 59 Vets to Get Special Cars From Oldsmobile, Oct 3 p 135 Washington Approves New Chev-rolet Light Car Project, Aug 29 p 130

Geneva Steel Co.:

Basing Point Established on Standard Structural Shapes, Nov 14 p
125
Basing Point Price Established for
Sheared Steel Plates, Oct 17 p
99
Employment Hite 2000 Description

Employment Hits 3000, Dec 5 p

First Basing Point Price Gives Lit-tle Encouragement for "Cheaper

tle Encouragement for "Cheaper Steel," Oct 24 p 78 Full Production Only Panacea for West Coast Shortage, Oct 3 p Labor Jurisdiction, Next Problem, July 4 p 90

July 4 p 90

Making Rapid Gains in Resuming Production*, Aug 1 p 109

Shortage of Railroad Cars Retards Production, Sept 12 p 109

Genrich Oven Div.: (See Rockwell, W. S., Co.)

Geometric Tool Co.: Die Head*, Dec 26 p 69

Germany: ermany:
Aluminum Pig to Be Shipped from U. S. Zone, Nov 28 p 126
Bimetal Tubing, Nov 28 p 76
British Debate Ruhr Steel Nationalization; Now Running at Loss, Sept 5 p 149
British Occupation Authorities May

alization; Now Running at Loss, Sept 5 p 149
British Occupation Authorities May Revive Industrial Activity of the Ruhr, Aug 8 p 90
Coal Planer Details Disclosed by U. S. Bureau of Mines, Dec 26 p 140
Contribution by Co.

ontribution by German Scientists to Nazi War Machine, Aug 1 p 151

Direct Reading Thermometer for High Temperature Use, Aug 8

p 53 mished Steel and Ingot Output Up in U. S. Zone, Nov 21 p 142 Farben Sale Promised to

irst Farben Sale Promised to Break the Combine, Aug 15 p

Forging Practice in Wartime Germany, Aug 1 p 55
French and British Opinion on Ruhr Coal Exports Differ, Sept 5 p 84

French and British Opinion on Ruhr Coal Exports Differ, Sept 5 p 84

German Technical Methods Will Improve American Production, Says Odarenko, Dec 26 p 132

High Temperature Turbine Blade Steels, July 11 p 52

Iron Ore Data Revealed by U. S. Bureau of Mines, Dec 19 p 128

Labor Shortage More Pressing Than Coal in Steel Production, Aug 22 p 84

Light Metals Production and Use Being Studied by U. S. Technicians, Oct 3 p 136

Measuring Controls Found Behind U. S. Practice, Sept 19 p 146

Pig Iron Output in U. S. Zone Unchanged, Sept 5 p 156

Pig Iron, Production in British Zone, Jan-July 1946, Aug 22 p 84

Pittsburgh Plus System Being Revived by U. S., Dec 5 p 106
Pressure Welding Thin Aluminum Parts*, Aug 8 p 56
Production and Uses of Beryllium, Aug 1 p 66
Production Doubled in U. S. Zone, Dec 26 p 109

Production Doubled in U. S. Zone, Dec 26 p 109 Radiographic Inspection Standards in Industry, Sept 19 p 47 Russians Try Luring Technicians Out of Other Occupation Zones, Nov 14 p 114 Scientists in America Where Army Reveals Research Activities*, Dec 12 p 116B Steel Mills Trail American Equip-ment, Says Hyland*, Aug 1 p 113

Steel Output in British Zone Faces
Curtailment Due to Coal Crisis,
Nov 7 p 84
Steel Producing Plants in British
Zone, Nov 28 p 98
Steel Production in British Zone,
Jan-July 1946, Aug 22 p 84;
July (Revised), Sept 26 p 107
Synthetic Spinel Used for Bearings, July 18 p 64
Unification of American and British Zones Economically Has Germany Agog, Aug 15 p 82
U. S. Experts to Study Highlights in Industrial Training,
Nov 7 p 130
Vacuum Melting*, Dec 12 p 64
Whiteley Named Controller of
Foundries in British Zone, Sept
12 p 157

Ghrist, Elmer: Forging High-Alloy Rounds With V-Type Dies*, Aug 1 p 44

Gibson Electric Co.: Contact Springs*, Oct 31 p 62

Giddings & Lewis Machine Tools Co.: oring and Facing Attachment*, Sept 12 p 79

Giern & Anholtt Tool Co.: Vertical Boring Machine, Nov 28 p 77

Gilbert-Baker-Midlam Co.: Step Chuck and Closer Combina-tion, Nov 7 p 69

Gippert, L. E., and Butler, G. M.,

Changes in Size and Toughness of High Carbon High Chromium Steels Due to Subzero Treat-ments, Nov 28 p 58

Gisholt Machine Co.:
Two - Element Balancing Machine
Incorporates Automatic Drill*,
July 25 p 62

Gladding, S. D.: Preparation of Raw Materials for Fast Melting in an Electric Arc Furnace, Dec 19 p 66

Globe Tool & Engineering Co.: Multi-Chuck Coil Winder*, Nov 28 p 82

Goddess, Eugene:
Sampling Techniques Applied to
Quality Control, Dec 12 p 70

Hammer Welding*, Aug 22 p 59

Goodman, David: X-Ray Diffraction as an Analyti-cal Tool*, Sept 19 p 55

Goodrich, B. F., Co.: Free Market Basis on World Rub-ber Recommended, Sept 19 p 148 Speed Selector*, Oct 31 p 60

Govro-Nelson Co.: Grinding Fixture*, Dec 26 p 70

Graham, R. W.: Casting Aluminum Billets for Ex-truding*, Dec 26 p 52

Granite City Steel Co.: Mediator Is Appointed to Assist in Settling Strike, Aug 8 p 109

Gray Co., Inc.: Bearing Lubricators*, Oct 10 p 77

Gray, G. A., Co.: Milling Machine*, July 4 p 77

Gray Iron Founders' Society: ray Iron Founders' Society:
Advisory Committee Meets With
CPA to Alleviate Pig Iron
Shortage, Aug 22 p 108
Members to Serve on Society's
Technical Committee, Oct 3 p 93

G

Gray Laboratory & Mfg. Co.: Universal Timer*, Aug 15 p 68

Gray Marine Motor Co.: Water-Jet-Propelled Bo oped, Oct 17 p 141 Boats Devel-

Gray-Mills Co.: Parts Cleaning Systems*, Sept 19 p 67

Great Britain: Aluminum Sheet Output to Be Expanded, Dec 12 p 100

American Steel Sought, Purchasing Prospects Worry British*, Oct 24 p 96
American Steel, 2 Million Tons, Sought by Duncan*, Oct 24 p 95
Auto Companies December 1

Faces Crisis,

ritish

Zone, 84; p 107 Bear-

Brit-

Ger-High-

64 ler of Sept

With

62 Tools

nent*,

ov 28

nbina-

. M..

ess of mium Treat-

achine Drill*,

ls for c Arc

Nov

ed to p 70

p 59

nalyti-

Rub-

p 70

or Ex-

Assist p 109

0 p 77

Iron

ciety's 3 p 93

68

Devel-

ept 19

to Be

Auto Companies Decry Sheet Steel
Cut, Oct 31 p 101
Automobile Production and Exports, August, September, Nov
7 p 95
Bill for Public Ownership of Steel
Industry to Be Introduced, Nov
28 p 94

28 p 94

Coal Exports to Europe Decrease in August, Oct 10 p 121

Coal Mines' Transfer to Public Ownership Due Jan. 1, Dec 5 p 162

Coal Production More Costly, Nov 14 p 207

Copper Zine Raised, Nov. 28 p. 98

Coar Frontein More Costly, Nov 14 p 207 Copper, Zinc Raised, Nov 28 p 98 Czechoslovak Imports May Be In-creased, Nov 14 p 206 Employment Figures, August, Nov 28 p 107

Employment Figures, August, Nov 28 p 107
Government Faced With Closed Shop Issue, Oct 24 p 82
Houses Built of Aluminum by Aircraft Firms May Reach 54,500 by Fall, Oct 31 p 91
Houses Completed, Under Construction, July, August, Oct 24 p 84
Housing Shortages Cause Spread of Squatter's Movement, Sept 12 p 97; Oct 10 p 96
Industrial Designers' Exhibition Displays New and Modern Paraphernalia Impossible to Obtain*. Oct 10 p 94
Industrial Firms Get 51 Government-Owned Factories, Oct 3 p 74

1talian Foundry Workers Will Re-lieve Labor Scarcity, Dec 19 p

lieve Labor Scarcity, Dec 19 p
156
Labor for Iron Foundries to Be
Recruited, Nov 14 p 204
Mercury Price Down, Nov 21 p 92
New 80-In. Cold Reduction Mill
to Be Installed by Summers*,
Nov 28 p 113
Nonferrous Metals Consumption,
Third Quarter, Nov 21 p 124
Occupation Authorities Stalling on
Dismantling German Steel Capacity Despite Potsdam Agreement, Nov 28 p 96
Plans Revised for Steel Control
Board, Sept 12 p 94
Prefabs Gain Wider Recognition in
Housing as First Orders Prove
Successful, Oct 24 p 82
Railways to Convert from Coal to
Oil Firing, Sept 12 p 159
Scottish Industry Worried About
Over-Rationalization, July 11 p
82
Scottish Shipbuilding Industry Suf-

Scottish Shipbuilding Industry Suf-fering Lack of Ways, July 18 p

scotts Shipbulding Industry Surfering Lack of Ways, July 18 p 90
Scrap Sales, Stocks. August-September, Nov 7 p 118
Steel Board Members and Main Duties, Sept 26 p 96
Steel Control Board Appointments Received With Some Criticism, Oct 17 p 88
Steel Exports to Decline in Last Quarter, Oct 17 p 90
Steel Production, Second Quarter 1946, July 25 p 91
Steel Sheet Shortage Worries Auto Exporters, Nov 28 p 96
Tin Stocks Decline in September, Nov 14 p 203
U. K. Exports for May Show Increase Over 1938, July 4 p 118
U. K. Steel Statistics, 1944-May 1946, July 25 p 103; June, Sept 5 p 111; July, Oct 3 p 88; August, Oct 31 p 101; September, Nov 28 p 114
Will Use Credit to Buy Equipment Necessary for Rehabilitation, July 25 p 103
Great Lakes Steel Corp.:

Great Lakes Steel Corp.:
Additional Cold-Rolled Capacity to
Be Installed, Oct 24 p 72

Grinding: frinding:
Abrasive, 32 Alundum, Reduces
Grinding Costs*, Nov 21 p 56
Abrasive Wheels, Wickman Corp.,
Sept 5 p 68
Annular Form Grinder, Sheffield
Corp.*, Nov 28 p 79
Axial Relief Grinding Fixture,
Govro-Nelson Co.*, Dec 26 p
70

Belt Attachment, Porter Cable Ma-chine Co.*, Nov 28 p 79

Bench Type Grinding and Lapping Machine, Wickman Corp.*, Nov 28 p 79
Buffer and Grinder, Hobart Bros. Co., July 11 p 68
Centerless Thread Grinder, Landis Machine Co.*, July 11 p 68
Collet Fixture, Zagar Tool, Inc.*, Dec 26 p 70
Crankpin Grinder, Landis Tool Co.*, July 4 p 77
Cut-Off Wheels, Bay State Abrasive Products Co., Aug 29 p 62
Cutter and Tool Grinder, Cincinnati Milling Machine Co.*, Sept 12 p 77
Cutter and Tool Grinder, Covel Mig. Co.*, Nov 28 p 79
D-S Tool Grinder, Royal Oak Tool & Machine Co.*, Sept 12 p 77
Diamond Wheel Cup, Precision Diamond Tool Co.*, Aug 29 p

Dust Collector, Aget-Detroit Co.*, Oct 10 p 78 External Grinder, Cincinnati Grinders, Inc.*, July 4 p 77 Feeding Hopper for No. 2 Centerless Grinders, Arthur Scrivener, Ltd.*, Nov 28 p 82 Flexible Shaft Grinder, Spring Specialty Co., Nov 7 p 68 Fluid, Microgrind 70, Quaker Chemical Products Corp., Nov 28 p 82

Chemical Products Corp., Nov 28 p 82
German Novel Precision Grinder Now Available for Testing, Oct 10 p 124
Grinder Attachment, D. & S. Model Co.*, Nov 7 p 68
Grinder Attachments, E. F. Hager & Sôn, Nov 7 p 68
High-Speed Grinder, Wyzenbeek & Staff, Inc.*, Nov 7 p 68
Horizontal Grinder, Master Pneumatic Tool Co., Inc., Nov 7 p 68

matic Tool Co., Inc., Nov 7 p
68

Hydraulic Machine, Cincinnati
Grinders, Inc.*, Nov 28 p 78
Internal Grinder, Bryant-Chucking Grinder Co.*, Sept 12 p 78
Portable Thread Grinders, Walz &
Krenzer, Inc., July 25 p 63
Production Experience Proves
Economy of Crush Grinding*,
Aug 29 p 34
Profile Grinder, Fritz Studer,
Ltd.*, Sept 12 p 77
Proposed Standards Revision for
Grinding Wheels, Aug 1 p 154
Rotary Grinder, Ideal Industries,
Inc.*, July 25 p 63
Selecting the Correct Wheel*, (2
Parts) Oct 31 p 41; Nov 7 p
64
Snagging Grinder, Standard Elec-

Parts) Oct 31 p 41; Nov 7 p
Snagging Grinder, Standard Electrical Tool Co.*, Nov 28 p 79
Swedish Centerless Grinders, Triplex Machine Tool Corp.*, July
4 p 78
Tap Sharpener, Edward Blake
Co.*, Nov 28 p 80
Taper Form Grinding of Piston
Skirts*, Oct 17 p 56
Tool Grinder, Gallmeyer & Livingston Co.*, July 4 p 78
Tool Grinding Fixture, George
Scherr Co.*, Sept 5 p 67
Turret Diamond Holder, Diamond
Tool Co.*, Dec 26 p 71
Valve Grinding Machine, Milwaukee Cock Grinding Machine, Milwaukee Cock Grinding Machine Co.,
Nov 28 p 80
Wheel Dresser, G. J. Wallen Mig.
Co.*, Aug 29 p 62
Grove Regulator Co.:

Grove Regulator Co.: Check Valve*, Aug 22 p 67 Guillemot, R.: Aluminum Blast Furnace Tuyeres*, Oct 10 p 68

Gurdin, Morton J.: Flame Sprayed Plastics*, Aug 22 p 64

H

Hafsten, R. J.: Welding Stabilized 18-8 Stainless*, July 11 p 60

Hager, E. F., & Son: Grinder Attachments, Nov 7 p 68

Ham, John L., and Parke, R. M.: Melting of Molybdenum in the Vacuum Arc*, Nov 28 p 65

Hambley, W. A., and Geist, K. R.: Practical Method of Selecting the Correct Type of Cast Iron*, (2 Parts) Oct 17 p 64; Oct 24 p

Practical Method of Specifying Cast Irons, Oct 31 p 46

Hamel, W. W.: Glycerine Use in Metal Coatings, Oct 10 p 67

Hamilton, Benjamin P.: Job Evaluation Scales*, Oct 10 p

Hamlin, Perley C.: Cost Reducing Program for a Job Shop*, Sept 26 p 56

Handy & Harman: Silver Brazing Alloys, Oct 24 p 68

Hanna, M. A., Co.: Earnings, First Half 1946, Aug 8 p 138; Third Quarter, Oct 31 p 94

Hanson-Van Winkle-Munning Co.:
Electroplating Control Table*, Sept
19 p 68
Manodyz Process for Coloring
Magnesium Alloys, July 25 p 59
Mercil Plating Apparatus with
Pumping Equipment*, Sept 19
p 66

p 66 Portable Plating Barrel*, Dec 5 p

Hardenability Test for Quenched and Tempered Steel, by E. J. Well-auer*, Sept 5 p 62

auer*, Sept 5 p 62

Hardening:
Alloys for High Temperature Service*, Nov 14 p 92
Changes in Size and Toughness of High Carbon - High Chromium Steels Due to Subzero Treatments, Nov 28 p 58

Effect of Tempering on Mechanical Properties, (2 Parts) Oct 24 p 44; Oct 31 p 50

Processing 4 Pct High - Purity Aluminum Alloy, Oct 31 p 45
P-V Test, Hardenability Measure*, Nov 14 p 66
Reducing Embrittlement in Electroplating*, Nov 21 p 69
Spinel Hardening Process, July 18 p 64
Use of High Frequency Induction Heating*, July 18 p 60

Hardinge Bros., Inc.:

Hardinge Bros., Inc.: Collet Holding Fixture*, July 25

Collet Holding Fixture*, July 25 p 64 Lathe Collet Stop*, Dec 26 p 72 Second-Operation Machine*, July 11 p 66

Hardy, Charles, Inc.: New Powders and Flake of Stain-less Steel, Sept 19 p 138

less Steel, Sept 19 p 138

Hardy, Gene:
Demands Cut in Priority Aids to Curb Steel Black Market Activities, Sept 5 p 101

First Half of 1947 Steel Demand Estimated at 29 Million Tons, Nov 21 p 106

Higher Steel Prices Appear Due; Industry Requesting Some Decontrols, Aug 22 p 98

Small Denies CPA Will Crowd Books With Rated Orders in Fourth Quarter, Sept 12 p 114

UNRRA Sets Chinese Farm Implement Goal at \$21 Million, Oct 31 p 104

Harman, William H., Corp.: RFC to Negotiate Contract for 10,000 Steel Houses*, Oct 17 p 127

Harmon & Co.: Inspection Lamp, July 25 p 65

Harris Soap Div.: (See Hygrade Food Products Corp.)

Hartman-Leddon C.: Spot Testing for Aluminum, Nov 28 p 68

Haythorne, P. A.:
Decarburization in Highly Stressed
Steels*, July 4 p 52
Temper Embrittlement of Aircraft
Steels*, Aug 29 p 51

Heat-O-meter: Heat Radiation Calculator, Aug 22 p 69

Heat Treating:
Aging Heat Treatments of 75S
Aluminum, Aug 15 p 49

Alloys for High Temperature Services, Nov 14 p 92
Atmosphere Generator, Lindberg Engineering Co.*, Nov 21 p 76
Coil Annealing by New Method, Oct 10 p 72
Controlled Atmospheres; Critical Survey, (3 Parts) Sept 19 p 42; Sept 26 p 74; Oct 3 p 50
Conveyorized Automatic Heat Treatments, Nov 14 p 70
Effect of Tempering on Mechanical Properties, (2 Parts) Oct 24 p 44; Oct 31 p 50
Gas Combustion Element, Bryant Heater Co.*, Nov 21 p 76
Gas-Immersion Heating of Liquids and Soft Metalss, July 11 p 46
Gas Premixer, Vapofier Corp.*, Nov 21 p 75
Measuring Heating Rate of Steel Slabs, Oct 10 p 74
Neutralene, Atmosphere Producers, Nov 21 p 48
Oven Makers Gave Heat Treaters Thermal Flexibility, Says Gehnrich, Oct 24 p 108
Power Generators, Radio Corp. of America*, Nov 21 p 76
Precision Casting Heat-Treatable Copper-Base Alloys*, Sept 19 p 48
Reducing Embrittlement in Electropolitics* Nov 21 p 76

Reducing Embrittlement in Electroplating*, Nov 21 p 69
Surface Pyrometer for Steel Slabs
Developed by U. S. Steel*, Oct
24 p 64
Tempering of High Alloy Tool
Steels, Nov 28 p 58

Heavy Alloy Aids Machine Design, by G. H. S. Price*, Sept 19 p 62

Hedstrom Industries, Inc.: Snap-Lock Jig*, Sept 5 p 68

Heidbrink, C. R., and Thrun, W. E.: Semiquantitative Tests for Moly in Steel, Oct 3 p 41 Spot Testing for Aluminum, Nov 28 p 68

Hendrick, George K.: So You're Designing a New Prod-uct!* Oct 31 p 36

Heppenstall, C. W., Jr.: Forging Practice in Warfime Ger-many*, Aug 1 p 55

Heraeus Vacuumschmelze: (See Siemens-Halske)

Herman Pneumatic Machine Co.: Hydraulic Operated Centrifugal Casting Machine*, July 25 p 48

Hertner Electric Co.: Lift Truck Motor-Generator Charger*, Dec 12 p 81

Herwig, Robert S.: Soft Water Rinse Improves Aluminum Finishes*, July 11 p 58

Hexacon Electric Co.: Soldering Irons*, Oct 24 p 67

Higgins Industries, Inc.: May Build 10,000 Steel Prefabs, Oct 31 p 107

High Speed Spectrography, by L. E. Owen*, (2 Parts) Aug 8 p 50; Aug 15 p 61

Hight, Jack R.:
British Government Plans to Name
Permanent Control Board*, Aug
29 p 102
British Worried Over Prospects
of Buying Steel Here*, Oct 24

of Buying Steel Here*, Oct 24 p 96 French Communists Seek National-ization of Steel Industry, Oct 10

p 120
French 5-Yr Plan Includes Steel
Equipment Modernization, Nov
21 p 119
Old Line Swedish Steel Companies
Planning Expansions*, Dec 26 p
106

Hill, James, Mfg. Co.: Hot Air Dryer Doubles Galvaniz-ing Output*, Aug 8 p 54

Hobart Bros. Co.:

Buffer and Grinder, July 11 p 68
Farm Welder*, Oct 24 p 66
Railway Welder*, Oct 24 p 65
Welding Booth*, Oct 24 p 68

Holden, A. F.: Conveyorized Automatic Heat Treatment*, Nov 14 p 70

Hole Engineering Service: Multiple-Purpose Unit*, July 4 p 80

Hollingshead, R. M., Corp.: Plastic Film Assures Safe Storage and Shipment of Machinery*, Aug 29 p 96

Hollup Corp.: Coated Electrode Developed Automatic Welding*, Dec 5

Holm, Vernon C. F.: Resinous Sealants for Porous Castings, Nov 14 p 90

Holman, H. E.: Automatic Welding in Steel Plant Maintenance, Oct 10 p 76

Home-Ola Corp.: RFC to Underwrite Output of 19,400 Steel Trussed Houses* Oct 24 p 125

Honan-Crane Corp.: Emulsion Breaker, Aug 22 p 69

Horberg Gage Co.: Gages, Pin*, Sept 5 p 70

Air Dryer Doubles Galvanizing Output, Aug 8 p 54 by W. G. Imhoff*,

Hot - Blast Cupola Design, by E. Longden*, Aug 29 p 44

Hotchkins, A. G., and Webber,

ew Heat Treating Atmosphere Producer*, Nov 21 p 48 Housing:

Housing:
Additional Materials Allocated to Aid Program, Oct 17 p 125
Aluminum Window Body Asks Vet Housing Aid, Nov 21 p 124
Britain Gives Wider Recognition to Prefabs as First Orders Prove Successful, Oct 24 p 82
British Aircraft Firms Building 54,500 Aluminum Prefabricated Houses, Oct 31 p 91
British Housing Shortages Cause Run on Abandoned Army Camps, Sept 12 p 97; Oct 10 p 96
British Prefabricated Housing Combines Steel and Clay*, Sept 5 p 105
British Units Completed, Under Construction, July, August, Oct 24 p 84
Canada Freezes Nails for Low

British Units Completed, Under Construction, July, August, Oct 24 p 84
Canada Freezes Nails for Low Cost Housing, Aug 1 p 107
Canadian Aluminum May Be Purchased by U. S. for Housing Program, Nov 7 p 118
CPA and NHA Take Steps to Speed Program, Sept 5 p 102
Copper Stockpile Offered for Housing, July 25 p 110
Export Items Amount to Less Than 3 Pct, Nov 14 p 116
Factory-Built Houses Using Half Aluminum Sheet and Extrusions Seen, Oct 24 p 106
Higgins Co. May Build 10,000
Steel Prefabs, Oct 31 p 107
Mobilization Plans Being Worked Out by Army-Navy Munitions
Board, Sept 19 p 74; Nov 14 p 106
Munitions Board May Now Issue

Munitions Board May Now Issue HH Ratings, Oct 31 p 98 NHA, Despite Vast Authority, May Fail in Program, Oct 31 p

NHA Names Al. Levinson Director, July 4 p 150
Planemakers May Build Prefabricated Aluminum Houses, Oct 17
Premium Payment Plane

p 109 remium Payment Plans on Build-ing Materials to Remain in Ef-fect, Nov 21 p 121 remium Payments Planned by Housing Expediter, July 18 p 161

FC to Negotiate for 10,000 Harman Steel Houses*, Oct 17

P 127
RFC to Underwrite Output of 19,400 Steel Trussed Houses*, Oct 24 p 125
Reconversion Problems Face Officials, Oct 24 p 109
Shortages in Construction No Longer Led by Metal Goods, Oct 31 p 106
Steel Window Program For Vets Lags Due to Steel Shortage, Dec 5 p 146

30 WAA Surplus Items Channeled Into Veterans' Projects, July 25 Into p 138

Program for 1947, Dec

Truman Program for 1947, Dec 19 p 123 LNRRA Rated Orders Cancelled to Aid Veterans Housing, Sept 19 p 107 Use of HH and HHH Ratings Explained to Nail Distributors, Aug 22 p 102 Vet Program to Get Priorities Assistance on Steel Castings, Nov 7 p 104 Veteran's Program Aided by Addi-

7 p 104 Veteran's Program Aided by Addi-tional Priorities, Sept 26 p 168 Wider Use of Steel in Home Con-struction Planned by U. S. Steel, Sept 26 p 164

How to Select the Correct Grinding Wheel, by R. B. Fair*, (2 Parts) Oct 31 p 41 Nov 7 p 64

Howell, J. M., and Johnson, Lee: Statistical Control of Accident of Accidents*, July 18 p 56

Hower, E. N.: Refractory Economy v. Combus-tion, Nov 21 p 64

Hudson Bay Mining & Smelting Co., Operations at Flin Flon, Canada*, Aug 22 p 105

Huebsch, N. L.: Binocular Magnifier, July 25 p 66

Huff. Warren: Kaiser-Frazer, Nov 7 p

Hulse, E. H.: Problems in High Frequency In-duction Heating*, July 18 p 60

Hume-Rothery, William: Electrons, Atoms, Metals Alloys, Nov 28 p 64

Humphrey, George M.: Receives Charles F. Rand Medal for 1947*, Dec 12 p 114

Hungary: Pig Iron and Iron Ore Production, Estimated Monthly Average, Nov p 95

7 p 95 Pig Iron Production, 1937, 1942, 1945, First Half 1946, Oct 31 p

91 Steel May Be Our Export Market Due to Temporary Reparations Cut, Oct 31 p 97 Steel Production, 1937, 1942, 1945, First Half 1946, Oct 31 p 91

Hydraulic Machinery, Inc.: Special-Purpose Machine*, Sept 12 p 79

Hydraulic Press Mfg. Co.: Earnings, Third Quarter, Nov 21 p 108 High-Pressure Diecasters*, Oct 3

Hydro-Aire, Inc.: Selector Valves*, Dec 12 p 83

Hydropress, Inc.: Cold Chamber Diecaster, Oct 3 p

Hygrade Food Products Corp.: Spray Booth Coating, Dec 5 p 90

Hyster Co.: Lift Truck*, Nov 14 p 100

Ideal Industries, Inc.: Resistance Tester, Oct 17 p 72 Rotary Grinder*, July 25 p 63

Illinois Manufacturers Assn.: Wilson Strikes Out at Abus Power Under Guise of Unism, Dec 26 p 113

Illinois Testing Laboratories, Inc.: Dewpoint Indicator*, Oct 17 p 73 Portable Pyrometer*, Oct 17 p 71

Imhoff, Wallace G.:

Het Air Dryer Doubles Galvanizing Output*, Aug 8 p 54

Incentives, Work: (See Work Incentives)

Independent Pneumatic Tool Co.: Impact Wrench*, Aug 29 p

nata:
Seen as Future Market for U.S.
Machine Tools, Oct 17 p 110
Tata Steel Reports Steel Ingot
Output of 1,135,000 Tons, Nov
28 p 118

Induction Heating:
Generator, Induction Heating
Corp.*, Nov 21 p 74
Kitchen Utensil Output Speeded
Up by Induction Soldering, Sept
26 p 169
Radiator Production Accelerated
by Induction Soldering*, Oct
24 p 55 by Indi 24 p 55

Induction Heating, Melting: Designing for Silver Brazing Designing for Silver Brazing
With Induction Heating*, Dec
26 p 62
Furnace Heats 350 Slugs per
Hr*, Sept 12 p 55
Problems in High Frequency Induction Heating*, July 18 p 60

Induction Heating Corp.: Induction Heating Generator*, Nov 21 p 74

Industrial Engineering & Supply Co.: Work Holder Clamp, Aug 29 p

Industrial Equipment Co.: Gantry Crane, Nov 14 p 100

Industrial Hygiene Foundation: Elects New Officers, July 4 p Elects 114

Industrial Power Trucks Cut Ma-terial Handling Costs, by W. A. Lloyd*, July 4 p 62

Industrial Washing Machine Corp.: Washing Machine*, Dec 5 p 88

Industry:
Annual Wage Issue Revived by
Government Report, Dec 5 p Canadian

anadian Construction in '46 Planned to Exceed \$1.1 Billion, Nov 7 p 150 ost Reducing Program for a Job Shop*, Sept 26 p 56 zech Metalworking and Machinery Industries Expected to Show Large Losses, Dec 5 p 159

Drive Against Big Business Timed to Congressional Elections, July 25 p 72

to Congressional Elections, July 25 p 72

Earnings and Hours in Manufacturing Industries (As of Oct. 1), by Industry, Dec 5 p 126

Earnings for Industrial Workers Up \$5 Weekly, BLS Reports, Dec 5 p 126

Electrical Power Used by U.S. Industries Increases 81 Pct Over 1939, Nov 28 p 113

Expected OPA Ruling May Require Output Gain of 15 Pct for Price Relief, Sept 5 p 108

Experts Seek Common Ground on Productivity Puzzle, Nov 7 p 97

Productivity Puzzie, Nov 7 p
97
Forms in Business, 1944-45, Chart,
July 25 p 99
German Highlights in Industrial
Training to Be Studied by U.S.
Experts, Nov 7 p 130
German Production Doubled in
U.S. Zone, Dec 26 p 109
German Technical Methods Will
Improve American Production,
Says Odarenko, Dec 26 p 132
Harriman Stresses Full Employment for Stable Economy, Oct
31 p 105
High Labor Costs Threaten Cali-

ment for Stable Economy,
31 p 105
High Labor Costs Threaten California's Industrial Economy,
Sept 19 p 78
Holland Embarks on Industrial
Recovery Plan*, Nov 21 p 110
House Monopoly Group Calls Off
Hearings on Big Industry, Oct
17 p 110
Inventories Show Record Rise in
September, Says CPA, Nov 7
p 111

Inventory Rules From 40 Items Removed by OTC, Dec 19 p

Evaluation Scales*, Oct 10

p 64 Justice Dept. Hamstrung in Action Against Labor for Restraint of Trade; Can't Stop Boycotts Under Present Laws, Oct 24 p

Machinery Firms Employ Third of All Workers in Cleveland Dis-trict, Nov 14 p 186 Manufacturers' Inventories Show

Ch

N.

Of

Of

Instr

Dr

Ele

Ele

Gla

He

Hi, Ior Lo

Me

Mi

Os Ph

Por

Red

Sel.

Tor

Un

Instru Din I

Ger H

Im Le

Pro

Pro Py

Sta

Te

Te

Te

triet, Nov 14 p 160
Manufacturers' Inventories Show
Increase, Dec 5 p 128
Mead Committee to Study Wartime Operations, Sept 12 p 86
Metalworking Firms in Ohio Planning New Plants and Additions,
Nov 14 p 162
Monnet Plan for Modernization of
French Industry Specifies Individual Goals for Basic Industries, Dec 19 p 98
Moscow to Have Permanent Exposition of Foreign Equipment,
Oct 17 p 154
NAM Announces New Liberal
Labor Program, Dec 12 p 120
OPA Changes Pricing Rules on
Industrial Machines and Equipment, Oct 24 p 103 NAM Announces
Labor Program, Dec 12 p 120
OPA Changes Pricing Rules on
Industrial Machines and Equipment, Oct 24 p 103
Ohio Losing Industrial Position
in Relation to Nation's Progress,
Sept 5 p 99

Sept 5 p 99
Packaged Manufacturing Plants
for Foreign Use Planned on
West Coast, Aug 22 p 141
Pennsylvania Has Problem in
Uneven Labor Supply, Nov 21
p 135
Page 22 p 141
Page 23 p 145
Page 24 p 145

Output Shows nce '39, Oct 10 nnsylvania

Pennsylvania Output Shows
Steady Rise since '39, Oct 10
p 112
Pittsburgh Study Reveals Liability
of Heavy Duty Weight, Oct
31 p 124
Planning a Plant Layout*, Dec
19 p 73
Portland Area Ignores Predicted
Slump as Industry Broadens
1ts Base, Aug 22 p 80
Price Increase Restraint Pleases
Washington, Nov 21 p 82
Republican Congress Heralds Return of Free Enterprise, Nov 14
p 132
San Francisco Bay's Major Worry

Republican Congress Heralds Return of Free Enterprise, Nov 14 p 132
San Francisco Bay's Major Worry
Was Rail Embargo and Brief General Strike; High Construction Rate Offers Antidote, Dec 12 p 94
Seattle Plants Increasing Production and Developing New Products, Aug 15 p 78
Setting Up for a New Product*, Nov 7 p 58
Shortages Cause Run on Commercial Loans by Small Plants*, Sept 5 p 110
Small Business Assured of Priority Aid in Steel, Oct 31 p 70
"Small Business" Defined by WAA, Oct 31 p 98
So You're Designing a New Product!* Oct 31 p 36
Social Insurance Program Included in Demands of UAW-CIO, Dec 12 p 88
Standard Systems—Vital Aid to Management*, Dec 26 p 48
Statistical Approach in Industria Research*, Aug 22 p 50
10-Day Quality Control Course Offered at University of Iowa, Sept 5 p 154
Twenty-One Plants to Be Allocated Among Allied Nations, Sept 5 p 82
U.K.-Belgian Groups Oppose Na-

Sept 5 p 82 U.K.-Belgian Groups Oppose Na-

U.K.-Belgian Groups Oppose Nationalization, Aug 15 p 84
Veterans Prefer Job Training in Mechanical and Metalworking Industries, Nov 7 p 113
Washington Shows Great Concern Over Prospect of Boom-Bust Period, Nov 14 p 129
Wineries in California to Expand, Says Peters, Nov 21 p 148

Inert-Arc Welding, By R. F. Wyer, Oct 31 p 57

Ingersoll-Rand Co.: P-V Test, Hardenability Meas-ure*, Nov 14 p 66

Inland Steel Co.:

Awarded East Chicago War

Plant, Oct 31 p 96

Coal Miner Picture Greatly Dis

torted, Says Sykes, Dec 19 p Chicago War

i-Bond Reinforcing Bar Outpu Licensed, Aug 22 p 113

Institute of British Foundrymen: Hot-Blast Cupola Designs Reviewed at Annual Meeting*, Aug. 29 p 44

Institute of Scrap Iron & Steel Barringer Clarifies Its Position July 11 p 102

Chapters Elect Officers, Oct 24 P 134 Y. Convention Discussed by Barringer; Officers Elected, Dec

Officers Elected by St. Louis and Northern California Chapters, Nov 14 p 200 Officers Elected by Southeastern Chapter, Nov 14 p 180

Instrument Society of America: Officers Elected, Nov 28 p 152

Show

War-Plan 86

ions,

on of

In-In-

beral 120 s on quip-

sition

gress,

Plants d 41

n in

shows

ability Oct

dicted adens

leases ls Re-

Worry Brief nstruc-

duct* lants",

Priority 70 ed by

New

m In-UAW-

Aid to 48 dustrial 0 Course I owa,

Vations,

ose Na-84 ning in working

Concern om-Bust

Expand,

Wyer*

Meas

to War

tly Dis-

Output

ymen:

gns Reng*, Aug

& Steel

Position.

Be

Officers Elected, Nov 28 p 152

Instruments, Laboratory:
Circuit Tester, Precision Apparatus
Co., Inc.*, Oct 17 p 72

Drum Type Calculator for Spectrographic Analysis, Harry W.
Dietert Co.*. Oct 17 p 74

Elecdropode Used for Polarographic Analysis of Zinc in Aluminum Alloys*, Oct 3 p 36

Electropolisher, Central Scientific Co.*, Dec 5 p 90

Frequency Meter, Communication Measurements Laboratory*, Aug 15, p.66.

Measurements Laboratory*, Aug 15, p. 66
Glass Tubing Cutter, Eberbach & Son Co.*, Dec 19 p. 84
Headloupe, Boyer-Campbell Co., Nov 7 p. 70
High Speed Spectrographic Equipment*, (2 Parts) Aug 8 p. 50; Aug 15 p. 60
Ion Gage, General Electric Co.*, Aug 15 p. 66
Low-Range Tester for Lighter Raw Materials and Small Finished Items. W. C. Dillon & Co., Inc.*, Dec 19 p. 82
Megohm Meter, Communication Measurements Laboratory*, Aug 16 p. 68

Measurements Laboratory*, Aug 16 p 68
Miniature Magnifier, Edroy Products Co., Dec 19 p 84
Oscillator Permits Stepless Adjustment*, Nov 28 p 66
Phase Microscope, American Optical Co., Dec 19 p 83
Portable Pyrometer, Illinois Testing Laboratories, Inc.*, Oct 17 p 71
Portable Stroboscope, Communication Measurements Laboratory*, Aug 15 p 67
Radioactive Tracer, Autoscaler, Tracerlab, Inc.*, Dec 19 p 82
Recording Dilatometer, Sylvania Electric Products, Inc.*, Dec 19 p 81
Selfbalancing Potentiometer, Auto-

Electric Products, Inc.*, Dec 19 p 81
Selfbalancing Potentiometer, Autopot, General Electric Co.*, Dec 19 p 83
Strain-Gage Amplifier, General Electric Co.*, Aug 15 p 66
Surface Finish Standards, University Machine Co., Dec 19 p 81
Torsion Testing Machine, Sonn-

Torsion Testing Machine, Sonn-tag Scientific Corp.*, Dec 19 p

82
Universal Testing Unit, Wilson
Mechanical Instrument Co.,
Inc.*, Dec 19 p 82
Universal Timer, Gray Laboratory
& Mfg. Co.*, Aug 15 p 68

Instruments, Process Control:
Direct Reading Thermometer for
High Temperature Use, Aug 8

p 53 low Rate Instrument, Fischer & Porter Co.*, Oct 17 p 73 erman Measuring Controls Be-hind U.S. Practice, Sept 19 p 146

Inmersion Pyrometers, Pyrometer Instrument Co.*, Oct 17 p 72 Lead Measuring Instruments, Fellows Gear Shaper Co.*, Nov

Fellows Gear Shaper Co.*, Nov 28 p 81
Liquid Steel Pyrometers*, July 25 p 52
Process Adjuster, Brown Instrument Co.*, Oct 17 p 74
Process Timer, Photovolt Corp.*, Aug 15 p 67
Pyrometer Controller, Wheeleo Instruments Co., Oct 17 p 72
Stainless Thermometers, W. C. Dillon & Co., Inc., Dec 19 p 84

84 Surface Pyrometer, Pyrometer Instrument Co.*, Oct 17 p 72 Temperature Compensator, Niles-Bement-Pond Co.*, Aug 15 p

Temperature Control, United Electric Controls Co.*, July 18 p

Tomperature Meter, Bailey Meter Co.*, Oct 17 p 71 Temperature Recorder, General Electric Co.*, July 18 p 76

Temperature Recorder-Controller, C. H. Tagliabue Div., Portable Products Corp.*, Oct 17 p 71 Temperature Regulator, ington Glass Laboratory & In-strument Co., Oct 17 p 71 Thermal Protector, Manning, Max-well & Moore, Inc.*, Oct 17 p 72 nstruments, Shop.

Instruments, Shop:
Adjustable Quadrangle, Stewart-Jackson Instrument Co., Sept

Jackson Instrument Co., Sept 5 p 70
Air Gage Attachments, Sheffield Corp.*, Sept 5 p 69
Angle Computer, Angle Computer Co.*, July 25 p 65
Apparatus for Accurately Setting Trammel Points*, Aug 1 p 49
Binocular Magnifier, N. L. Huebsch, July 25 p 66
Blade Tension Device, Tensiometer*, Oct 24 p 56
Chart Viewer, General Electric Co.*, Dec 19 p 84
Circuit Tester, Precision Apparatus Co., Inc.*, Oct 17 p 72
Coating Thickness Gage, Ameri-

Coating Thickness Gage, American Instrument Co., Dec 5 p

Dial Comparator, Standard Gage Co., Inc.*, Nov 7 p 70 Dynamometers for Measuring Torque, L. A. B. Corp.*, Aug 15 p 65 Elapsed Time Indicator, Marion Electrical Instrument Co., Dec

Electrical Instrument Co., Dec 19 p 83 Electronic Comparator, Jack & Heintz, Inc.*, Sept 5 p 69 Electronic Counter, Potter Instrument Co.*, Aug 22 p 69 Electronic Timer, Electronic Controls, Inc.*, Aug 22 p 69 Electronic Vacuum Pressure Gage, Radio Corp. of America*, Dec 19 p 82 Elongation Testers, General Electric Co.*, July 18 p 75 Flexible Gage Plug Handles, Sapphire Products Div., Elgin National Watch Co., Nov 7 p 70

p 70
Full-View Rotameter, Brooks Rotometer Co.*, Aug 15 p 67
Gage, Adjustable Length, F. H.
Smith Mfg. Co.*, Sept 5 p

Gage Control Unit, Niles-Bement-Pond Co.*, Sept 5 p 69 Gage Design Problems Solved by Special Slide Rule*, Oct 24 p

Gage, Dial Bore, Standard Gage Co.*, Sept 5 p 70 Gage Kit, DcAll Co.*, Sept 5 p 68

Gage Measures Sheet Thickness by Deflection*, July 18 p 67
Gage, Portable Thread, Bryant Chucking Grinder Co.*, Sept 5 p 68
Gage, Tool Setting*, F. H. Smith Mfg. Co.*, Sept 5 p

Smith Mig. Co., Sept 5 p 70 Gages, Pin*, Horberg Gage Co.*, Sept 5 p 70 Hand Tachometer, Metron Instru-ment Co.*, July 25 p 65 Hand Tachometer, O. Zernickow Co.*, Sept 5 p 70 Hardness Gages, R. A. Webster*, Dec 19 p 84 Heat Radiation Calculator, Heat-O-Meter, Aug 22 p 69 High Frequency Probe, Alfred W. Barber Laboratories*, July 25 p 66

Barber Laboratories*, July 25 p 66
Inch Converter, American Hydromath Co., July 25 p 66
Ion Gage, General Electric Co.*, Aug 15 p 66
Lead Comparators for Gear Production, Michigan Tool Co.*, Dec 26 p 70
Leaf Taper Gages, Moore Special Tool Co., Inc.*, Nov 7 p 70
Megohm Meter, Communication Measurements Laboratory*, Aug 15 p 68

Measurements Laboratory*, Aug 15 p 68
Metal Identifier, Control Equipment Co.*, July 18 p 75
Micrometer, Sapphire Products
Div., Elgin National Watch
Co.*, Dec 26 p 72
Operational Recorder, Ess Instrument Co.*, Dec 19 p 83
Optical Centering Tool, Benton
Co.*, Dec 26 p 70
Optical Micrometer, Aireon Mfg.
Corp.*, Sept 5 p 70
Orifice Computer, Willsonn Computers*, Oct 10 p 80

Photoelectric Control, Photoswitch, Inc.*, Dec 19 p 83 Plug Gages and Thread Measur-ing Wires, Van Keuren Co., Nov 7 p 70

Programs of the state of the st

p 71
Pressure Gage, Manning, Maxwell & Moore*, Aug 15 p 67
Pressure Gages, U.S. Gauge Div., American Machine & Metals, Inc., Dec 19 p 83
Pressure Indicator, Electro Products Laboratories*, July 18 p 76

76
Protractor, Universal Engraving & Colorplate Co., Inc.*, July 25 p 66
Reflectoscope Checks Steel Plate Quality for Welding*, Sept 12

p 64 emote Indication System, Allis-Chalmers Mfg. Co.*, Aug 15 p

Remote Indication System, Allis-Chalmers Mfg. Co.*, Aug 15 p 68
Slide Rule, Charles Bruning Co., Inc., Oct 10 p 80
Slide Rule, Pickett & Eckel, July 25 p 66
Slide Rule for Calculating Press Size*, Nov 28 p 69
Strain-Gage Amplifier, General Electric Co.*, Aug 15 p 66
Streamlined Gages, American Machine & Metals, Inc., Aug 15 p 66
Stroke Counter, Production Instrument Co.*, July 25 p 66
Surface Analyzer, Brush Development Co.* Dec 19 p 81
Surface Comparator, Comtor Co., July 25 p 65
Surface Finish Measuring Instrument, Topograph, David Brown & Sons (Huddersfield) Ltd.*, Dec 19 p 81
Tension Indicator, W. C. Dillon & Co., Inc.*, Oct 17 p 74
Thread Gages, American Machine & Gage Co., July 25 p 65
Vernier Calipers, American Measuring Instrument Ring Gage, N. A. Woodworth Co.*, July 25 p 65
Vernier Calipers, American Measuring Instruments Corp., July 25 p 65

Intercontinental Engineering Corp.: Plan Packaged Manufacturing Plants for Foreign Use, Aug 22 p 141

Interlake Iron Corp.: Earnings, 2nd Quarter 1946, Sept 5 p 132

International Assn. of Electrical Leagues:
Excess Retail Dealers Seen As
Threatening Home Appliance
Field, Nov 7 p 155

International Business Machines Corp.: Automatic Press Feeder Prevents Accidents*, Oct 31 p 56

International Conference on Trade and Employment:
Preparatory Committee Meets to Draft Proposal for World Trade Agreement, Oct 31 p 76, 104;
Dec 19 p 160: Dec 26 p 78

International Detrola Corp.: Acquires Properties of Andrews Steel Co., Aug 15 p 100

International Harvester Co.:

Malleable Iron Foundry Acquired,
July 18 p 159
Radiator Production Accelerated
by Induction Soldering*, Oct 24
p 55

P 55
International Nickel Co.:
Canadian Branch Increasing Output, Oct 24 p 114
Nickel Price Not Yet Established,
Dec 26 p 118
Prices Increased, Nov 28 p 126
Wartime Applications of Nickel
and Alloys Continue Expanded
Use, Dec 5 p 150

International Nickel Co. of Canada, Ltd.: Net Profit Decreases, First Half 1946, Aug 22 p 116

International Smelting & Refining Co.:

Closes Due to Lack of Raw Ma-terials, Aug 1 p 110

International Trade Organization:
Proposed Association Will Deal
With World Commerce, Oct 17
p 80; Dec 5 p 96

Interstate Commerce Commission:
Freight Rise Means 14-Pct Jump
for Iron and Steel, Dec 12 p
113
Low Motor Truck Rate From
Geneva Stirs Little Interest,
Nov 28 p 92
Says Roads Need Not Furnish
Spotting Service at Large
Plants, Aug 15 p 110

Ireland: Steel Output Estimated for 1946 and 1947, Oct 3 p 72

Irish Steel Co., Ltd.: Second Openhearth Project Being Readied, Oct 3 p 72

Iron, Metallurgy:
Effect of Particle Size on Iron
Powder Properties*, (2 Parts)
Dec 5 p 72; Dec 12 p 76
Selecting the Correct Type of Cast
Iron*, (2 Parts) Oct 17 p 64;
Oct 24 p 58

Iron, Production: Canadian Output Not Yet Affected by U.S. Coal Strike, Dec 5 p

by U.S. Coal Strike, Dec 5 p
124
Czech Production, August, Nov
14 p 157
Czechoslovakia Faces Huge Task
Under New 2-Yr Plan, Nov
14 p 157
Czechoslovakia's Output, Jan-May
1946, Aug 22 p 86; MayAugust, Oct 31 p 101
Pig, Scrap Shortages Cut Foundry
Output, Aug 15 p 126
Renewed Interest Shown in Electric Furnace, Dec 19 p 94
Swedish Sponge Powder Now
Available at Lower Prices*, Sept
26 p 114

The Iron Age:
Bannister, Fred, Appointed New
England Manager, Aug 22 p 111
Staff Changes: T. L. Kane, R.
M. Gibbs, T. W. Lippert*, Nov
14 p 140
Warren, Dwight C., New England
Manager, Dies*, Aug 8 p 104C

Iron Ore: (See Ore, Ferrous)

Irvington Varnish & Insulator Co.: Insulating Varnish, Dec 5 p 90

Irwin Mfg. Co., Inc.: Hammer Boards, Oct 3 p 58

Island Equipment Corp.: Gravity Conveyors*, Aug 8 p 74 Unscrambling Table, Aug 8 p 75

Italy: Aluminum Price Increase, Oct 3

Aluminum Price Increase, Oct 3 p 106
Britain Will Get Italian Foundry Workers to Relieve Labor Scarcity, Dec 19 p 156
Economists Ponder Absence of Coal and Iron Ore, Aug 29 p 76

76
Ferrous Materials to Be Imported Duty-Free, Oct 24 p 140
Iron and Steel Prices in Central and Southern Provinces, Oct 10 p 117
New National Wage Policy Announced, Oct 24 p 84
Steel From UNRRA Coal*, Dec 26 p 103
Steel Industry Needs Include Greater Integration*, Oct 10 p 121A

U.S.-Italian Financial Firm Dis-cussed, Oct 31 p 78

J

Jack & Heintz, Inc.: Electronic Comparator*, Sept 5 p 69

Jacobs Aircraft Engine Co.: Job Evaluation Scales*, Oct 10 p

Japan:
Employment, Hours and Wages,
May, Aug 1 p 76
Industrial Output Gains Slightly
Despite Many Shortages, Aug
29 p 128

Iron and Steel Operations to Be Handled by One Plant; U.S. Report on June Production, Sept 26 p 154

Rebuilding China Industry Pro-tested by American Potter Firms, July 11 p 74 Removal of Aluminum and Mag-nesium Plants Recommended,

nesium Plants Recommended, Nov 28 p 121 Rise and Fall of Industrial Em-pire*, Oct 17 p 114

Jessop Steel Co.: Complete Big Stainless-Clad Order, Sept 12 p 111 Test Completed on Clad Metal Bumpers and Other Accessories, Nov 28 p 157

Job Evaluation Scales, by B. P. Hamilton*, Oct 10 p 64

Johnson, Lee, and Howell, J. M.: Statistical Control of Accidents*, July 18 p 56

Johnson Motors: Die Casting Outboard Motor Parts*, Aug 15 p 50

Joint Intelligence Objectives Agency: German Bimetal Tubing, Nov 28 p 76

Joints: Designing for Silver Brazing With Induction Heating*, Dec 26 p

Pipe Joint Compound, Lake Chemical Co., Oct 10 p 78
Universal Joints, Brooks Equipment Corp.*, Aug 1 p 70

Joly, G.: Shapes and Sizes of Cupola Tuy-eres, Dec 6 p 50

Jones, C. Walker, Co.: Safety Cuff, Aug 22 p 70

Jones, M. H., and Brown, W. F., Jr.: Strain Analysis by Photogrid Method*, Sept 12 p 50

Jones & Lamson Co.: Ground Thread Dies, Sept 5 p 67 Self-Opening Die Head*, Sept 5 p

Jones & Laughlin Ore Co.: Buys Benson Iron Ore Plant, Aug 22 p 111

Jones & Laughlin Steel Corp.:

Appeals Court Holds Against J
& L in Mine Foremen Union
Case, Dec 19 p 123
Charged by UMW with Refusal
to Bargain, Sept 5 p 136
Induction Heat Treated Cold-Finished Bars Now Available, Dec
12 p 114
No Agreement Reached in Foremen Case, Aug 22 p 99
Takes Legal Action in Attempt to
Rescind UMW Foremen's Contract, July 25 p 98
Truman Approves Order Allowing Unionization of Mine Foremen, Aug 15 p 106
UMW Now in Position to Obtain
Contract for Supervisory Men
in Dispute, July 4 p 112

Junkin Safety Appliance Co., Inc.:

Junkin Safety Appliance Co., Inc.: Die Closure*, Oct 3 p 58

K

Kaiser & Co., Inc.:

Coal Burning Turbine Unit for
Locomotives Will Be Tested,
Nov 28 p 150
Iron Chief Iron Mine Rights
Jeopardized by Litigation, Dec
5 p 127
Plates, Shapes and Bars Increased
by \$7 Net Ton, Dec 26 p 104

Kaiser-Frazer Corp.:
Detroit Audience Views Kaiser-Frazer Autos, Aug 8 p 112
Discount on Cars to Employees, Dec 12 p 88
Foreign Rights Granted for Light Car. July 18 p 92

Car, July 18 p 92 Huffs Joins Staff, Nov 7 p 107

Huffs Jones

Kaiser, Henry J.:
Calls Critics "Scandalmongers"
Deal in "Half Truths,"

Calls Critics "Scandalmongers"
Who Deal in "Half Truths,"
Aug 15 p 109
Magnesium Aluminum Passenger
Bus - Trailer Practically Eliminates Steel, July 5 p 76

Reported Ready to Bid on Republic's South Chicago Works*, Aug 8 p 104B

Kato Engineering Co.: Motor-Generator Set*, Aug 1 p 67

Kay, R. Raymond: Low Cost Patterns for Multi-Stage Dies*, Aug 22 p 56

Kearney & Trecker Corp.: Knee-Type Milling Machines*, July 11 p 66

Kelley, F. C.: Properties of Sintered Iron-Copper Powders*, Aug 15 p 57

Kelley, F. C., and Fisher, F. E.: Extruded Powder Metal Welding Rods*, Dec 19 p 68

Kelsey-Hayes Wheel Co.:
Buys Surplus Aluminum Ingot
and Forging Plant at Monroe,
Mich., Oct 17 p 109

Kennametal, Inc.:
Cemented Carbide Strip Mill Rolls,
Sept. 5 p. 61
Disk File, Dec. 26 p. 72
Face Mill*, July 25 p. 63
Gripping Inserts*, Nov. 7 p. 70
Grooving Tool Blades*, Dec. 26 p. 71 Lathe File*, Aug 29 p 62

Kennecott Copper Co.: Price Increase on Copper, Nov 14 Price In p 146

Vertical Milling Machine*, July 11 p 67 Kent-Owens Machine Co.:

Kerst, D. W.: 20-Million Volt Betatron for In-dustrial Radiography*, Nov 21 p 60

Kessler, F. E., and Butler, A. R.: Arcwelding Tool Steel, Nov 28 p 59

Keystone Steel & Wire Co.: Sues OPA to Block Amendment Controlling Scrap, Oct 3 p 83 Tie-In Sales Continued Tempo-rarily; OPA Halted, Nov 7 p 120

Kindt-Collins Co.: Metal Dowel*, Sept 26 p 82

Kinzel, A. B.: Re-Elected Chairman of Engineer-ing Foundation, Nov 7 p 152

Klee, Edward T.: Electrode Dressing Tool*, Oct 24 p 68

Klingelhofer Machine Tool Co. Bar Bending Machine*, Oct. 3 p 57

Knu-Vise, Inc.: Toggle Pliers*, July 25 p 66

Kopecki, E. S.: Melting Rimmed Steel in the Elec-tric Arc Furnace*, Sept 26 p 62 Oxygen in Steelmaking, Nov 28 p

e P-V Test—a New Harden-ability Measure*, Nov 14 p 66

Koppers Co., Inc.: Will Begin Operating Styrene Part of Synthetic Rubber Plant at Kobuta, Pa., Oct 24 p 109

Kostoch, F. R.: Aging Heat Treatments of 75S Aluminum, Aug 15 p 49

Kropp Forge Co.: Leases Forge Plant, July 4 p 157

Krumlauf, G. P., and Manning, G. K.: Effect of Tempering on Mechanical Properties, (2 Parts) Oct 24 p 44; Oct 31 p 50

Kuhlman Electric Co.. Indirect Arc Rocking I Furnace*, Sept 26 p 81 Electric

A. B. Corp.: Dynamometers*, Aug 15 p 65

Abuse of Power Under Guise of Unionism Hit by Wilson, Dec 26 p 113

Allis - Chalmers Workers Vote to Return, Oct 3 p 90
AFA Organizes Personnel Committees, Nov 7 p 148
AISC Convention Discusses Deterrents to Maximum Efforts, Nov 7 p 110
Armco River Boat Crews Reject CIO-NMU, Oct 17 p 152
Britain to Recruit Labor for Iron Foundries, Nov 14 p 204
British Employment Figures, August, Nov 28 p 107
British Government Faced With Closed Shop Issue, Oct 24 p 82
BLS Report on Labor-Management Disputes, 1935-39 Average, Jan.-Oct., 1944, 1945, 1946, Dec 12 p 92
Canada May Face Steel Strike If Unions Find Wage Offers Too Low, July 11 p 109
Canadian Shortages Cut Work Week of Locomotive Employees, July 11 p 84
Chemical Groun Opens Clearing Houses for Chemical Engineers, Oct 10 p 167
CPA Will Certify Key Workers for Deferment Under Selective Service, Sept 5 p 112
Cleveland Industrial Employment at New High, Sept 12 p 105
Detroit Employment Hits Peacetime High*, Sept 5 p 72
Employment on High Level Needed for Stable Economy, Says Harriman, Oct 31 p 105
Employment Trend in 1946 as Shown in Federal Security Agency Report, Oct 24 p 99
Employment Trends Will Show No Change, Predicts USES, Oct 31 p 100
Experts Seek Common Ground on Productivity Puzzle, Nov 7 p 97
Ford Motor Co, Revises Vacation Rules, Aug 29 p 91
French Labor Shortages Constitute Serious Handicap in Progress Toward Prewar Normaley, Nov 21 p 90
GM Leads in Employing World War II Veterans, Dec 19 p 88
German Highlights in Industrial

Nov 21 p 90
GM Leads in Employing World
War II Veterans, Dec 19 p 88
German Highlights in Industrial
Training to Be Studied by U. S.
Experts. Nov 7 p 130
Incentive Pav and Uniform Wage
Pattern Involved in New Automotive Strikes, Iulv 11 p 70
Index of Industrial Training Films
Has 159 Titles on Metals, Nov
28 p 86
Job Evaluation Scales* Oct 150

Joh Evaluation Scales*, Oct 10 p

J & L Charged With Refusal to Bargain, Sept 5 p 136 J & L Loses in Appeals Court in Mine Foremen Union Case, Dec 19 p 123 Justice Dept. Hamstrung in Ac-tion Against Labor for Restraint of Trade; Can't Stop Boycotts Under Present Laws, Oct 24 p 74

74
Labor Monopolies Have Prevented
Output of Necessities of Life,
Savs Miller. Dec 26 p 112
Legislation Studies Being Made
by Professional Engineers, Dec
26 p 112
Machine Firms Frank (III)

Machinery Firms Employ Third of All Workers in Cleveland Dis-trict. Nov 14 p 186 Midwest Employment (Table) July 18 p 108 NAM Announces New Liberal Labor Program, Dec 12 p 120 National Metal Trades Assn. Fa-vors Repeal of Wagner Act; Says Fails Its Purpose, Nov 28 p 152 Niles-Bement-Pond, Workers 73

p 152
Niles-Bement-Pond Workers Return, Aug 15 p 100
No Agreement Reached in J & L
Mines Foremen Case, Aug 22 p

Pennsylvania Civilian Labor Now 4½ Million, Oct 17 p 152 Pennsylvania Has Problem in Un-even Labor Supply, Nov 21 p 135

Pension Plan for Dow Chemical, Sept 12 p 84 Pittsburgh Situation Seen Easing,

Oct 24 p 138

Public Looks to Democrats to Keep Wages Up, July 11 p 101

Republic Steel Challenges Unionization of Coal Mine Foremen,

Nov 14 p 174

H

Ruttenberg Quits To Go With Steel Co.; Golden Resigns Also, July 11 p 100
Shortage Looms in Pittsburgh; Strike Hit 75,000 Workers, Nov 21 p 135
Shortage Seen by October in Midwest Areas*, July 18 p 108
Shortage Until Year End Seen, With Leveling Off Early Next Year, Oct 3 p 100
SKF and Steel Union Celebrate Agreement, July 18 p 158
Social Insurance Program Included in Demands of UAW-CIO, Dec 12 p 88
Strikes at Plants of Big Three of Canadian Steel Industry No.

12 p 88 Strikes at Plants of Big Three of Canadian Steel Industry Not Based on Collective Bargaining, Justice Roach Says, Aug 1 p 107

Justice Roach Says, Aug 1 p
107
Supply Up. Jobs Go Begging,
Says USES of Pennsylvania
Area, Aug 29 p 124
Truman Approves Order Allowing
Unionization of J & L Mine
Foremen, Aug 15 p 106
UMW Now in Position to Obtain
Contract For Supervisory Men
in J & L Case July 4 p 112
Veterans Prefer Job Training in
Mechanical a nd Metalworking
Industries. Nov 7 p 113
Vets Form 26 Pct of Employed
in Pittsburgh Area Manufacturing Concerns, Nov 21 p 135
Western Metals Mines Wage Contracts Off, July 11 p 112

Labor, Wages:

abor, Wages:
Alcoa Wage Contract Extended,
Dec 12 p 109
Annual Wage Issue Revived by
Government Report, Dec 5 p 122
Annual Wage Plan Will Be Offered by O'Mahoney, Dec 12 p

Auto Negotiations to Be Accompanied by Statistical Barrage, Dec 26 p 74

Auto Workers Start "Walking Time" Suits, Nov 28 p 116

Back Wages Suit Filed Against Continental Motors Corp., July 18 p 80

Break in National Wage Pattern for Seattle Machinists, Sept 12

Bundy's Cost Saving Plan Additional States of the Saving Plan Additional States of

for Seattle Machinists, Sept 12 p 92

Bundv's Cost Saving Plan Adds to Employee Base Pay*, Oct 31 p 64, 92

Canadian House Committee Hears Waxe Demand Called Spur to Inflation. Aug 1 p 107

Chrvsler to Discuss Wage Increase With UAW-CIO, Sept 12 p 155

Coal Crisis Brings Gloomy Outlook; May Set New Wage Pattern. Nov 28 n 109

CIO Eyes Net Profits of Industry in Lining Up New Wage Increase Demands, Nov 28 p 116

Cost Reducing Program for a Job Shop*. Sept 26 p 56

Distribution of Plant Workers on Basis of Wage Rates Paid, by Region, Sept 19 p 80

Earnings and Hours in Manufacturing Industries (as of Oct. 1), by Industry, Dec 5 p 126

Earnings for Industrial Workers Up \$5 Weekly, BLS Reports, Dec 5 p 126

Earnings vs. Output Per Manhour, 1909-1945, Chart, July 25 p 101

Employment, Hours and Wages in British Industry. Ian 1046 Am

La

L

L

Employment, Hours and Wages in British Industry, Jan 1946, Aug 22 p 95

22 p 95
Employment, Hours and Wages in
Steel Industry, May, July 11 p
98; June, Aug 15 p 100; July,
Sept 12 p 105; August, Oct 24
p 93; September, Nov 7 p 95;
October, Dec 26 p 97
Ford Sees Little Chance for Guaranteed Annual Wage, Sept 26 p
84

84

Annual Wage, Gept 29 P.
84
French Factory Workers Get 18
Pct Pay Raise, Aug 22 p 136
French Government to Grant General Price Rise Covering Wage
Costs, Oct 10 p 121
Guaranteed Annual Wage Plan
Looks to Future Labor-Management Contracts, Aug 15 p 74
Guaranteed Annual Wage Will Be
New Battlecry, Declares Snider,
Nov 7 p 134
High Costs Protested by Metal
Trades Manufacturer of Southern California, Sept 19 p 78

With

irgh; Nov

Mid-

Seen, Next

brate

luded Dec

ee of Not ining,

ging, Ivania

owir

Men 12

ng in orking

ployed

ended,

ed by p 122 e Of-12 p

ccomalking

gainst July

attern

Adds Oct 31

Hears pur to

p 155 Out-e Pat-

dustry

p 116 a Job

ers on

anufac-et. 1),

6 Forkers eports,

Man-uly 25

ages in 6, Aug

ages in y 11 p ; July, Oct 24 p 95;

r Guar-pt 26 p

Get 18

nt Gen-Wage

e Plan

p 74 Will Be

Metal South-78

Hourly Earnings Rise in August, Oct 31 p 105 Increase in Average Hourly Earn-ings in Los Angeles, Jan 1941-June 1946, by Industry, Sept 19

p 7/8 Italian Government Announces New National Wage Policy, Oct 24 p 84 Japanese Wage Scale, May, Aug 1

Japanese Wage State, May, 186 7 p 76 Motor Payrolls Up, Nov 28 p 107 Nathan's Study Claims 21 Pct Wage Boost Possible*, Dec 19 p 118

p 118
No Steel Wage Demands by
USWA Seen During Current
Contract Year, July 11 p 100
Nonferrous Mining Industry Feels
Government Has Misled It on
Premium Price Payments and
New Wage Contracts, Oct 24 p
80

Patternmakers To Ask \$2.75 Per Hr Minimum Wage Scale, Dec 5p 92

Fr Minimum Wage State, Dec 5 p 92

Percentage Relationship Between Pacific States and Other Regions by Average Hourly Earnings, Sept 19 p 80

Steel Take-Home-Pay, October 1944-August 1946, Oct 31 p 97

Steel Union Threatens to Sue for Millions in "Walking Time" Payments, Nov 14 p 134

Steelworkers to Ask Healthy Wage Increase in January, Oct 31 p 97

Steelworkers to Ask Healthy Wage Increase in January, Oct 31 p 97
Strikes Cost Labor \$1.5 Billion in Wages, Nov 21 p 109
Tension to Ease, Distribution to Improve With Controls Off, Nov 14 p 127
Union Seeking Industry Wage Pattern in Chrysler Case, Oct 31 p 64
Union Sues U. S. Steel Asking \$120 Million Walking-Time Pay, Dec 12 p 122
Unions Announce Wage Demands on Foundries, Nov 28 p 84
U. S. Steel and USWA Agree on Basic Policy on Plant Standard Rates, Oct 3 p 86
USWA District Meeting Portends Wage Increase Demands Next February, Oct 31 p 72
USWA Expected to Keep Specific Wage Demands Under Cover at Present, Dec 19 p 119
USWA Will "Go All Out" for Higher Wages, Says Murray, Dec 5 p 123
Westinghouse White Collar Union Asks 16-Pet Cost of Living Bonus, Dec 19 p 125
Whys of John L's Strike and of Calling It off Flow Freely in Washington, Dec 19 p 90

Lacquer: Rack Coating, Michigan Chrome & Chemical Co., Dec 5 p 90

Lake Chemical Co.:
Pipe Joint Compound, Oct 10 p
78

Lake Superior Iron Ore Assn.:
Consumption and Stocks of Lake
Ore, June, July 25 p 104; July,
Aug 29 p 104; August, Oct 3 p
83; September, Oct 31 p 98
Ore Shipments, July, Aug 15 p
97; August. Sept 12 p 112;
September, Oct 10 p 109

Landis Machine Co.:
Automatic Nipple Machine*, Nov
28 p 81
Centering Throat Chaser*, Dec
26 p 69
Centerless Thread Grinder*, July
11 p 68
Die Heads*, July 25 p 63

Landis Tool Co.: Crankpin Grinder*, July 4 p 77

Lasalco, Inc.: Barrel Plater*, Sept 19 p 67

Latimer, Murray W.:
Government Report Revives Annual Wage Issue, Dec 5 p 122

Lead:
Allocations, September, Aug 29
p 108; Fourth Quarter, Oct 10
p 126; Oct 17 p 130
British Report Shows Use Declining, Nov 21 p 124

Canada to Raise Output, Oct 31 p

Canada's Output, June, Sept 12 p 122; August, Nov 7 p 118 CPA Drops Set-Aside, Dec 19 p

128 CPA Revises Order, Oct 31 p 110 CPA to Act Against Lead Battery Violations, July 4 p 124 Consumers Receive Only a Por-tion of Their Needs, July 25 p 112

consumers Receive Only a Portion of Their Needs, July 25 p 112
Control Seen After Expiration of CPA, Sept 26 p 126
Crisis Demands Lead Industry Committee, Sept 12 p 122
Further Restricted by CPA, Sept 5 p 116
Government Stockpile, 31,000
Short Tons, Aug 8 p 118
Imports During July Will Reach 8700 Tons, July 4 p 160
Lack of Raw Material Closes International Smelting & Refining Co., Aug 1 p 110
Mines and Smelters Get Priorities, July 18 p 116
OPA Closes Door on Price Increase, Sept 5 p 116
Price Increase Still Sought by Producers, Nov 14 p 182
Prices Nov 14 p 182
Prices Nov 14 p 182
Prices Nov 14 p 163
Quebec Lead Smelter Syndicate Plans to Build, Dec 19 p 128
Quebec Lead Smelter Syndicate Plans to Build, Dec 19 p 126
Remelt Output Increases Greatly
Due to Subsidies, Aug 1 p 155
Shortage Is Attributed to British-U.S. Importation Agreement,
Sept 26 p 117
Shortage Still Severe, Oct 24 p 114
Subsidies Increased, Sept 19 p 112
Supplies Continue Lipitial

Shortage Still Severe, Oct 24 p 114 Supplies Continue Limited Due to Ceiling Rollback, Aug 15 p 114 Supply Situation Critical, Sept 19 p 112 U. S. Contracts for Foreign Lead Supplies, Oct 10 p 126 WAA to Offer Surplus, Oct 10 p 170

LeBlond, R. K., Machine Tool Co.: Dual Drive Lathe Developed*, Dec 12 p 69 12 p 69 Motor Head Lathe*, July 11 p 65

Lee Wilson Engineering Co.: New Method of Coil Annealing, Oct 10 p 72

Leiman Bros., Inc.: Sandblasting Machine*, Sept 19 p 67

Lend-Lease:
Exports of Iron and Steel Products, 1941-45, by Year and by Country, Dec 26 p 102
Value of Shipments, 1941-44, by Country, Dec 26 p 102

Leonard Precision Products Co.: Bending Machine*, Oct 3 p 57

Leslie Co.: Regulating Valves, Dec 12 p 83

Lesser, Arthur, Jr.: Statistical Approach in Industrial Research*, Aug 22 p 50

Lester Engineering Co.: To Reorganize Tool and Die Division, July 18 p 154

Lewis, C. J.:
Disposing of Plating Room Waste
Liquors, Aug 8 p 71

Lewis-Shepard Products, Inc.: Electric Power Fork Truck*, Nov 14 p 99

Lillieqvist, G. A.:

Effect of Sulphur in Cast Steel,

Dec 19 p 66

Lincoln Electric Co.: Hard-Facing Electrodes, Oct 24 p 67

Lincoln Park Industries: Measuring Wires*, Sept 5 p 69

Lindberg Engineering Co.: Atmosphere Generator*, Nov 21 p 76 Carbon Determinator*, July 18 p

Linde Air Products Co.: Flux-Coated Bronze Welding Rod, Oct 24 p 67

Guide Simplifies Gas Cutting of Pipe*, Aug 22 p 58 Oxygen Torch Speeds Blast Holes for Ore Mining*, Dec 19 p 64 Tailor-Made Boiler Tubing*, Aug 15 p 48

Linderman Devices, Inc. Tension Brake, Aug 8 p 76

Link-Belt Co.: Bucket Elevator*, Nov 14 p 100

Link Engineering Co.: Engine-Mount Testers, Aug 15 p 65

Linsley, H. E.:

Buick Modernizes Cylinder Bore
Production*, Nov 21 p 65
Cutting Stainless Steel with the
Electric Arc*, Nov 14 p 96
New Lathe Produces Precision
Leadscrews*. Aug 1 p 58
Pressure Welding Thin Aluminum
Parts*, Aug 8 p 56
Producing Formed Steel Plumbing Fixtures*, Nov 7 p 54

Linxweiler, C. J., and Moss, R. Y.: Production Experience Proves Economy of Crush Grinding*, Aug 29 p 34

Lipe-Rollway Corp.: Pneumatic Bar Feed*, July 4 p 80

Lippert, T. W.:
Day of Portents, Dec 12 p 55
Fission at Bikini*, July 18 p 50
Frightening the Frightened, Nov
28 p 39

28 p 39 Mama, the Price Fixer, Nov 21 p Two Plus Two Equals Five, Dec 19 p 55

Lipson, S., Markus, H., and Rosen-thal, H.: Precision Casting Heat - Treatable Copper-Base Alloys*, Sept 19 p 48

Lithium Co.: Descaling Furnace, Nov 21 p 74

Little, Arthur D., Inc.: Electropolishing of Silver, Aug 1 p 49

Electropolishing of Silver, Aug 1 p 49

Lloyd, Thomas E.:
Alcoa, with Eye on Government, Girds for New Domestic and Future Canadian Competition*, Oct 3 p 99

Booking Solid Through '46; Orders Squeezed by Backlogs, July 25 p 93

Claims Auto Makers Are Getting Full Share of Current Steel Output, Oct 17 p 101

High Steel Output Hinges on Steady Coal Supply This Winter, Oct 24 p 104

How to Cut Schedules Is Steelmakers' Problem, Dec 5 p 117

Mexican Steel Plant to Expand Ingot and Rolling Capacity*, Sept 26 p 121

Non-Certified Industries Face Layoffs Due to Iron Shortages, Sept 26 p 110

Small Steel Producers Announce Scattered Price Increases, Nov 21 p 103

Uneven Labor Supply Poses Problem for Keystone State, Nov 21 p 135

Lloyd, W. A.:

Lloyd, W. A.:
Current Lake Shipments Point to
Adequate Iron Ore Supply This
Spring, Oct 10 p 109
Industrial Power Trucks Cut Material Handling Costs*, July 4

p 62 Lake Shipping Strike Seen About 80 Pct Effective*, Sept 12 p

Lake Shipping Strike Threatens to Cut Steel Operations This Winter, Aug 15 p 96
Motch & Merryweather Exhibit New Swiss Machine Tools*, Dec 12 p 116
Opinion Varies Over Future Status of Machine Tool Activity*, July 4 p 108
Use of Oxygen in Furnaces May Revolutionize Steelmaking, Nov 21 p 104

Lockheed Aircraft Corp.:

Effect of Surface Scratches on Alclad Sheet, Oct 3 p 40

Temper Embrittlement of Aircraft Steels*, Aug 29 p 51

World's Largest Transport Plane Is Flying Hotel, Nov 21 p 88

Logan Engineering Co.: Chain-Drive Shaper*, Nov 28 p 80

Logansport Machine Co., Inc.: Air Cylinders*, Oct 10 p 77 Air Equipment, Sept 12 p 80

London Economist:
After UNRRA? Aug 15 p 107
American Prices and OPA, Sept
12 p 117
Another 1929? Oct 3 p 97
Army in Council, Sept 26 p 119
The Atomic Plan, July 4 p 117
Byrnes and Wallace, Oct 10 p
119
Cleavage Widens Sept 5 p 100

119 Cleavage Widens, Sept 5 p 109 Close-Up of UN, Dec 19 p 121 Conclusion in Paris, Nov 7 p 109 Discipline and Democracy, Dec 26

p 111
The End of Let's Pretend, Sept 19 p 105
End of Price Control, July 25 p 105
Pleeting Opportunity, Oct 17 p

German Prisoners of War, Oct 24 p 107
Is a Slump Coming? Nov 14 p 139
The Loan at Last, Aug 1 p 111
Menace of Atomic War, Oct 31 p
103
Neo-Isolation, Aug 8 p 113
Politics and Planners, Dec 5 p 125
Power Politics in Paris, Aug 22 p
109
Reason and Russia Dec 12 p 146

Reason and Russia, Dec 12 p 119 The Russian Budget, Nov 28 p 119 The Soviet Government, July 11 p 105

Vacations, 1946, Aug 29 p 101 Veterans and the Government, Nov 21 p 115 Warning From the West, July 18 p 111

Lone Star State Co.: WAA Approves Lease, Sept 19 p 108

Longden, E.: Hot-Blast Cupola Design*, Aug 29 p 44

Low Cost Patterns for Multi-Stage Dies, by R. R. Kay*, Aug 22 p 56

Lownie, H. W., Jr., and Eakin, C. T.: Reducing Embrittlement in Elec-troplating*, Nov 21 p 69

Lubricants:
Bearing Lubricators, Gray Co.,
Inc.*, Oct 10 p 77
Bottle Oiler, Oil-Rite Corp.*, Oct Bottle Oiler, Oil-Rite Corp.*, Oct 10 p 77
Die Lubricant Cuts Forging Costs*, Oct 17 p 55
Drillyfe Minimizes Internal Friction in Drilling, July 11 p 45
Emulsion Breaker, Honan - Crane Corp., Aug 22 p 69
Pipe Joint Compound, Lake Chemical Co., Oct 10 p 78
Protective Value of Industrial Lubricants*, Oct 3 p 46

Lukens Steel Co.: Earnings, 3rd Quarter, July 25 p 147 Luma Electric Equipment Co.: Soldering Tool*, Oct 24 p 67

Lundahl, E. W.: Training Spark Testers*, July 18 p 65

Lustman, B.:
Dissociation Pressures of Metal Oxides, Sept 26 p 61

Luxemburg: Steel Industry, Sept 26 p 96

Lyon Metal Products, Inc.: Filing Cabinets, Dec 12 p 84

Lyon-Raymond Corp.: Hydraulic Lift Truck, Aug 8 p 73

Mabor Co.:
Dip-Agitating Machine for Cleaning Parts*, Dec 5 p 87
Solvent Degreaser*, Sept 19 p 66

Machine Specialties: Cut-Off Saw Attachment, July 25

Machine Tool Industry:
Approved Dealers Licensed to Expedite Sales, July 11 p 131;
July 18 p 138

Belgian Industry Operating at Estimated 100 Pct, July 4 p 161
Brand Name Ruling, Aug 22 p 114
Brand Name Tools Have New Pricing Method, Oct 31 p 108
British Physicist Asks Industry to Assume Leadership, Oct 24 p 136
Builders Gloomy as Orders Fall Off, July 4 p 122
Builders Hoid Prices Despite Decontrol, Aug 22 p 106
Builders Ponder Puzzling Profit Problem, Dec 26 p 116
Dealer Sales of Surplus Tools, May-June, July 18 p 138
Distributors Condemn Recent WAA Actions; Ask for Reforms, Sept 26 p 111, 124
Dollar Revaluation May Help Canadian Buyers, July 25 p 124
Expansion Trend for Special Tooling to Reduce Labor Costs, Aug 15 p 138
Exports, Sept.-Dec. 1945, Jan.-June 1946, Aug 8, p 105
Faces Casting Shortages, July 25 p 110
Fears Sales of Surplus Tools, Aug

p 110 Fears Sales of Surplus Tools, Aug

Fears Sales of Surplus Tools, Aug 8 p 116 India Seen as Future Market for U. S. Tools, Oct 17 p 110 MDNA Studying Repair Specs for Used Tools, July 18 p 114 Metal Lath Producers Deny FTC Charges That Industry Fixes Prices, Sept 26 p 90 New Wage Scale in Seattle, Sept 12 p 92

Charges That Industry Fixes Prices, Sept 26 p 90
New Wage Scale in Seattle, Sept 12 p 92
Opinion Varies Over Future Status of Activity*, July 4 p 108
Output Drops; July Sales Hit 1946 Low, Sept 5 p 114
Portion of War Dept. Budget Wanted for Storage Charges, Aug 1 p 76
Price Changes Seen As Few, Hope Parts Will Ease. Nov 14 p 129
Prices May Soon Be Decontrolled Says Huber, Oct 17 p 112
Sales Trend Continues Mixed, July 18 p 114
Shipments and Orders, June, July 11 p 110; July, Aug 29 p 106, Sept 19 p 110; August, Oct 10 p 124; September, Oct 24 p 112; October, Nov 28 p 124
Some Prices Up; Others Steady, Nov 21 p 122
Surplus Cuts Machine Tool Demand, Aug 22 p 114
Surplus Sales Below Clayton Formula Prices Rumored, Sept 12
Surplus Sales Booming at Cut

p 120

mula Prices Rumored, Sept 12 p 120
Surplus Sales Booming at Cut
Prices, Nov 14 p 144
Surplus Sales Cut August Shipments, Oct 10 p 124
Surplus Sales Volume, Cleveland
Region, January-November, Dec
26 p 114
Surplus Trade Brisk in Southern
California, Dec 26 p 82
\$350 Million Machine Tools to Be
Sold on Cut Price Basis, Oct
17 p 113
Tooling for Tapers*, July 18 p 68
Unfilled Orders Continue Downward Trend, Nov 28 p 124
U.S. Tool Production and Exports, 1918-1945, Aug 22 p 148
WAA Disposal Faults Highlighted
by O'Mahoney, Oct 3 p 104,
117

by O Manoney, Oct 3 p 104, 117
WAA Divides on Cutting Clayton Formula Prices, Sept 19 p 110
WAA Has \$860 Million in Machinery, Aug 15 p 112
WAA Has Removed All Threat of Nonpayment of Commission Claims, July 4 p 109
WAA May Change Rule on Extras, July 25 p 110
WAA Offers \$13 Million at New York Site Sales, July 4 p 120
WAA Permits Direct Sales of Aeronautical Tooling, Aug 8 p 84

WAA Pricing Policy Draws Diverse Views, Oct 17 p 128;
Oct 31 p 108
WAA Speeds Tool Disposal, Nov 7 p 76
Wrench Makers Adopt Simplified

rench Makers Adopt Simplified Standards, Sept 5 p 145

Machine Tools:
Air Collet, Mead Specialties Co.*,
Aug 29 p 61
Air Equipment Unit, Logansport
Machine Co., Inc., Sept 12 p 80

Automatic Chucking Machine, National Acme Co.*, July 11 p 65
Automatic Nipple Machine, Landis Machine Co.*, Nov 28 p 81
Bar Feed, Pneumatic, Lipe-Rollway Corp.*, July 4 p 80
Bar Machines, Automatic, Warner & Swasey Co.*, July 4 p 80
Bed Turret, Enco Mfg, Co.*, July 4 p 80

4 p 80 Bench Drill, Dumore Co.*, Nov 7

8 p 80

Bench Drill, Dumore Co.*, Nov 7

p 67

Bench Type Grinding and Lapping Machine, Wickman Corp.*,
Nov 28 p 79

Boring and Facing Attachment,
Giddings & Lewis Machine
Tools Co.*, Sept 12 p 79

Buffer and Grinder, Hobart Bros.
Co., July 11 p 68

Buick Modernizes Cylinder Bore
Production*, Nov 21 p 65

Centerless Lapping Machine, Size
Control Co.*, Sept 12 p 80

Chain-Drive Shaper, Logan Engineering Co.*, Nov 28 p 80

Chip Separator, McKenzie Engineering Co.*, Nov 28 p 82

Chuck, Indexing, Redmer Air Devices Corp.*, Aug 29 p 61

Chuck, Thin-Body, Edward Blake
Co.*, Aug 29 p 61

Collet Air Chuck, Redmer Air Devices Corp.*, July 25 p 64

Collet Fixture, Zagar Tool, Inc.*,
Dec 26 p 70

Collet Holding Fixture, Hardinge
Brothers, Inc.*, July 25 p 64

Cork Slab Foundation for Heavy
Tools*, Sept 19 p 64

Die Head, Geometric Tool Co.*,
Dec 26 p 69

Die Heads, Landis Machine Co.*,
July 25 p 63

Drill Chip Breaker, Ex-Cell-O

July 25 p 63

Drill Chip Breaker. Ex-Cell-O
Corp.*, Aug 29 p 59

Drill Press Converter. Leo G.
Brown Engineering Co.*, Dec

Drill Chip Breaker. Ex-Cell-O Corp.*, Aug 29 p 59
Drill Press Converter. Leo G. Brown Engineering Co.*, Dec 26 p 69
Drilling Closely Spaced Multiple Holes*, Dec 5 p 71
Dual Drive Lathe Developed by LeBlond*, Dec 12 p 69
Duplicating Attachment. Bailey Meter Co.*, Aug 29 p 59
Electrical Tools, Bradford Machine Tool Co., July 11 p 68
Expanding Arbor, Auto-Arb, Asco Corp.*, Dec. 26 p 71
Expanding Mandrel. Erickson Steel Co., July 25 p 64
Facing and Centering Machine, Cross Co.*, July 4 p 79
Fixture Clamp. N. A. Woodworth Co.*, Aug 29 p 60
Flat Lapping Machine, Spitfire Tools, Inc.*, Nov 28 p 81
Floating Tool Holder, Mosley Mfg. & Sales Co.*, Dec 26 p 71
Gage Sets, United Precision Products Co., Sept 5 p 69
Gage, Tool Setting*, F. H. Smith Mfg. Co.*, Sept 5 p 70
Grinding Fixture, Govro-Nelson Co.*, Dec 26 p 70
Grinding Fixture, Govro-Nelson Co.*, Dec 26 p 70
Gripping Inserts, Kennametal, Inc.*, Nov 7 p 70
Higher Parts Prices Worry Industry, Dec 5 p 130
Impact of WAA Price Move 90
Days Off, Nov 7 p 116
Lathe Collet Stop, Hardinge Bros., Inc.*, Dec 26 p 72
Lathe, Crankpin, Wickes Brothers*, July 11 p 65
Lathe, Crankpin, Wickes Brothers*, July 11 p 65
Lathe, Motor Head, R. K. Le Blond Machine Tool Co.*, July 11 p

Falls Machine Co.*, July 11 p
65
Lathe, Motor Head, R. K. Le
Blond Machine Tool Co.*, July
11 p 65
Live Centers, Royal Products, Nov
7 p 67
Machine Vise, Porterfield Mfg.
Co., Aug 29 p 60
Magnetic Chuck and Parallel,
Magnetic Holding Devices,
Inc.*, Nov 7 p 69
Mandrel, Precision, Young Arbor
Co.*, Aug 29 p 61
Market Quiet With Foreign Sales
Spotty, Aug 1 p 116
Measuring Wires, Lincoln Park
Industries*, Sept 5 p 69
Micro - Speed Shaper, Simmons
Machine Tool Corp.*, July 4 p
Milling Machine Co. A Gray Co.*

Milling Machine, G. A. Gray Co.*, July 4 p 77 Miniature Jigs, N. A. Woodworth Co.*, Aug 29 p 59

Monarch Lathe Produces Precision Leadscrews*, Aug 1 p 58 Multi-Chuck Coil Winder, Globe Tool & Engineering Co.*, Nov 28 p 82

28 p 82 Multiple-Purpose Unit, Hole Engineering Service*, July 4 p 80 Parallel Setup Blocks, Moore Special Tool Co., Inc.*, Sept 5 p

Protective Value of Industrial Lubricants*, Oct 3 p 46
Reamers, Precision, N. J. Daniels Tool Co., Aug 29 p 61
Rod Balancing Fixture, Snyder Tool & Engineering Co.*, Nov 28 p 81
Sales by WAA and Private Industry, by Month, June 1945-June 1946, Oct 3 p 104, 117
Scrivener Piston-Grinding Machine*, Oct 17 p 56
Second - Operation Machine, Hardinge Brothers, Inc.*, July 11 p

Self-Opening Die Head, Jones & Lamson Machine Co.*, Sept 5 p

67
Single Spindle Swiss Automatic,
Commentry Industries, Inc.*,
July 11 p 66
Snap-Lock Jig, Hedstrom Industries, Inc.*, Sept 5 p 68
Special-Purpose Machine, Hydraulic Machinery, Inc.*, Sept 12 p
79
Spiral Turning Machine

Special-Purpose Machine, Hydraulic Machinery, Inc.*, Sept 12 p
79
Special Turning Machine, Snyder
Tool & Engineering Co.*, July
11 p 66
Spin Dimpler, Topflight Tool Co.*,
Sept 12 p 79
Step Chuck and Closer Combination, Gilbert-Baker-Midlam Co.,
Nov 7 p 69
Strategic Reserve to Be Set Up
by Air Materiel Command, Oct
24 p 112
Surplus Tools on Sale at Buffalo,
Sept 19 p 76
Swiss Tools Exhibited by Motch
& Merryweather*, Dec 12 p 116
Swiss Type Converter, Oxford Engineering, Inc.*, Nov 7 p 69
Tap Extractors, Aug 29 p 61
Tap Holder, Releasing, Burg Tool
Mfg. Co.*, Aug 29 p 61
Tap Holder, Releasing, Burg Tool
Mfg. Co.*, Nov 28 p 80
Tapping Control Unit, Pond Engineering Control Unit, Pond Engineering Control Unit, Pond Engineering Co.*, Nov 28 p 80
Taps, Electrolized, Electrolized
Tap Corp.*, Aug 29 p 61
Thread Gage Sets, American Machine & Gage Co.*, Sept 5 p 69
Tool Adjustment Block, Howard
Dearborn Inc.*, Aug 29 p 60
Tool Bit, Fearless Tool Co.*, Aug
29 p 60
Tool Holder, Bokum Tool Co.*,
Dec 26 p 72
Turning Tool Holders, CooperBessemer Corp.*, Aug 29 p 60
Turtet Diamond Holder, Diamond
Tool Co.*, Dec 26 p 71
2800 on Sale in Chicago, Dec 7 p
44
Vacuum Grip Lathe, Crozier Machine Tool Co.*, Dec 26 p 70

2800 on Sale in Chicago, Dec 7 p
94
Vacuum Grip Lathe, Crozier Machine Tool Co.*, Dec 26 p 70
Valve Grinding Machine, Milwaukee Cock Grinding Machine Co.,
Nov 28 p 80
Wet Belt Surfacer, Porter-Cable
Machine Co.*, July 4 p 80
Wheel Dresser, G. J. Wallen Mfg.
Co.*, Aug 29 p 62
Work Holder Clamp, Industrial
Engineering & Supply Co.*, Aug
29 p 59
Wrench, Automatic, Fen Machine
Co.*, Dec 26 p 69
Wrench, Impact, Independent
Pneumatic Tool Co.*, Aug 29 p
62

Machinery:
Earth Mover, Warner & Swasey
Co., Sept 12 p 111; *Nov 7 p
53

Firms Employ Third of All Workers in Cleveland District, Nov

ers in Cleveland District, 2004 14 p 186 Flame Cutting and Welding in Bulldozer Manufacture*, Sept 12

Massive Forgings for Pulp Mill Machinery*, Sept 26 p 69 Moscow to Have Permanent Ex-position of Foreign Equipment, Oct 17 p 154 OPA Changes Pricing Rules on Industrial Equipment, Oct 24 p 103

Gu Hu

Mi

Se

St

Man Pr

Man (S

Man Ma

Ma

Ma

Ma

M

M

M

M

Plastic Film Preserves Industrial Equipment from Corrosion and Moisture*, Aug 29 p 96 Price Control Suspended on Mis-cellaneous Items, Sept 26 p 116 Price Increase in Construction Price Increase in Construction and Road Machinery, Sept 19 p

109
Priorities' Loss Faced by Three
More Types of Textile Machinery, Oct 24 p 76
WAA Lists Machines to Be Sold
as Scrap, Aug 29 p 98

Machining:
Automatic Chucking Machine, National Acme Co.*, July 11 p 65
Buick Modernizes Cylinder Bore
Production*, Nov 21 p 65
Chip Separator, McKenzie Engineering Co.*, Nov 28 p 82
Cutting Oils, Texas Co., Nov 28

p 82
Disk File, Kennametal, Inc., Dec 26 p 72
Facing and Centering Machine, Cross Co.*, July 4 p 79
Fly Cutters, New Field Machined Parts Co.*, Aug 29 p 62
Magnetic Separator for Small Parts, Oct 31 p 49
Micro-Speed Shaper, Simmons Machine Tool Corp.*, July 4 p 78
Special-Purpose Machine, Hydraulic Machinery, Inc.*, Sept 12 p 79
Valve Hole Machine

alve Hole Machine, Defiance Machine Works, Inc.*, Nov 28 p 78

MacKenzie, James T.: Centrifugal Casting in Germany⁹, July 25 p 46

Magnesium: British Patented Magnesium Joining Process, Sept 12 p 65
Capacity During War Years, Oct 17 p 180

17 p 180 Coloring Alloys', July 25 p 59 Dow Chemical Extras Up, Nov 21 p 109 Extruded Sticks' Prices Increased by Largest Producer, Oct 31 p

110
Extruded Tubing Specifications,
Oct 31 p 55
Industry Boomed by War; Out to
Up Current Sales, Oct 17 p

Products Price Revision Seen, July

Removal of Japanese Plants Recommended, Nov 28 p 121
Tensile and Creep Strengths of Some Alloys at Elevated Temperature, July 4 p 76

Magnetic Holding Devices, Inc.: Magnetic Chuck and Parallel*, Nov 7 p 69

Magnets:
Atom Smashing Cyclotron Magnet, Sept 19 p 145
Portable Magnet Charger, Radio Frequency Laboratories, Inc.*,

MagniLastic: (See Cook Electric Co.)

Mahoning Valley Industrial Council: Urges Lake-to-River Canal, Nov 7 p 151

Mahoning Valley Steel Co.:

Bought by GE to Assure Supply
of Steel Sheets, Nov 7 p 108

Malleable Founders' Society Elects Officers, Aug 15 p 136

Mallory, P. R., & Co., Inc.: Rhodium Plating, Dec 5 p 89

Management:

AFA Organizes Personnel Committees, Nov 7 p 148

Annual Reports Studied by AMA to Set Basis for Best Presentation, Nov 14 p 189

Coal Mines Get Safety Code, Sept 19 p 150

Experts Seek Common Ground on Productivity Puzzle, Nov 7 p 97

German Highlights in Industrial Training 40 Be Studied by U. S. Experts, Nov 7 p 130

Guaranteed Annual Wage Plan Looks to Future Labor-Manage-ment Contracts, Aug 15 p 74 Human Relations Are Prime Re-sponsibility, Executive Pol1 Shows, Sept 19 p 153 Index of Industrial Training Films Has 159 Titles on Metals, Nov 28 p 86 Job Evaluation Scales*, Oct 10 p 64

strial and

Mis-p 116 uction 19 p

Three Ma-

Sold

e, Na-

p 65 Bore

Engi-

ov 28 , Dec

chine,

hined Parts,

p 78 drau-12 p

fiance

ov 28

any*,

Join-

, Oct

59 Nov

reased 31 p

tions,

ut to

, July

Rechs of Tem-

allel*,

Mag-Radio Inc.*,

uncil: Nov

6

39

AMA senta-

, Sept

nd on

istrial by

Job Evaluation Scales*, Oct 10 p

64

Must Have the Right to Manage,
Says Gwilym A. Price, Aug 1
p 149

Production Control for Small
Plants*, July 25 p 49

Setting Up for a New Product*,
Nov 7 p 58

Standard Systems — Vital Aid*,
Dec 26 p 48

Statistical Control of Accidents*,
July 18 p 56

Steel's Safety Record Reveals Improvement, Sept 5 p 142

Training Time Study Men*, Aug
1 p 50

Manning, G. K., and Krumlauf, G. P.: Effect of Tempering on Mechani-cal Properties, (2 Parts) Oct 24 p 44; Oct 31 p 50

Manning, Maxwell & Moore: Pressure Gage*, Aug 15 p 67 Thermal Protector*, Oct 17 p 72

Manpower: (See Labor)

Manterfield, D.: Temperature Measurement of Li-quid Steel*, July 25 p 52

Marion Electrical Instrument Co.: Elapsed Time Indicator, Dec 19 p

Maritime Commission:
Gives Army Engineers \$10 Million
to Build Permanent Fleet Sites,
Oct 3 p 66

Market Forge Co.: Load Truck, Aug 8 p 74

Marking:
Marking Attachment, Acromark
Co.*, July 25 p 65
Pocket-Size Marker, Cushman &
Denison Mfg. Co., Oct 10 p 80

Markus, H.; Rosenthal, H., and Lipson, S.: Precision Casting Heat-Treatable Copper-Base Alloys*, Sept 19 p

Martin, Glenn L., Co.: Gage for Measuring Sheet Thick-ness*, July 18 p 67

Mason, J. F.:

Porcelain Enamel Coating for Aluminum, Aug 15 p 60
Surface Finishes for Aluminum*,
(3 Parts) Aug 29 p 40; Sept 5
p 50; Sept 12 p 66

Massachusetts Society of Professional Engineers: Worcester Chapter Organized, Dec 5 p 128

Massey Machine Co.: Hand Truck*, Aug 8 p 75

Master Pneumatic Tool Co., Inc.: Horizontal Grinder, Nov 7 p 68

Material Movement Industries: Lightweight Conveyor, Aug 8 p 75

Materials Handling:
Aluminum Pallets Cut Material
Handling Cost*, Aug 8 p 66
Apron Feeder, Pioneer Engineering Works, Inc.*, Nov 14 p 100
Automatic Material Racks, American Machine & Foundry Co.,
Aug 8 p 75
Barrel Loader, Revolvator Co.*,
Aug 8 p 76
Bucket Elevator, Link-Belt Co.*,
Nov 14 p 100
Bucket, 17½-Ton Clamshell, for
Transfer of Coal from Boats to
Dock Storage*, Oct 10 p 109
Close Clearance Grab, American
MonoRail Co., Aug 8 p 76
Conveyorized Automatic Heat
Treatment*, Nov 14 p 70

Crane Cab Cooler, Dravo Corp.,
Aug 8 p 76
Crane Controller, Electric Controller & Mfg. Co., Aug 8 p 76
Earth Mover, Warner & Swasey
Co., Sept 12 p 111; "Nov 7 p

53
Tooling for Tapers
68

Co., Sept 12 p 111; "Nov 7 p
53
Electric Industrial Truck and Tractor Bookings Climb in October,
Dec 5 p 148
Fork Truck, Lewis-Shepard Products, Inc.", Nov 14 p 99
Gantry Aids Welded Tank Production", Sept 12 p 70
Gantry Crane, Industrial Equipment Co., Nov 14 p 100
Gravity Conveyors, Island Equipment Corp.", Aug 8 p 74
Hand Truck, Automatic Transportation Co., Aug 8 p 74
Hand Truck, Massey Machine Co.", Aug 8 p 75
Hydraulic Lift Truck, Lyon-Raymond Corp., Aug 8 p 73
Industrial Power Trucks Cut Handling Costs", July 4 p 62
Industrial Truck Handles 30-Ton Loads", Dec 5 p 80
Lift Truck, Barrett-Cravens Co.", Nov 14 p 99
Lift Truck, Hyster Co.", Nov 14 p 100
Lightweight Conveyor, Material Movement Industries, Aug 8 p
75
Load Cart, Market Forge Co.,

75 Load Cart, Market Forge Co., Aug 8 p 74 Loading and Tiering Truck, El-well-Parker Electric Co., Aug

Aug 8 p 74
Loading and Tiering Truck, Elwell-Parker Electric Co., Aug
8 p 73
Mechanical Pouring Unit Handles
11 Tons Per Hour®, Dec 5 p 77
Modern Ideas for Cutting Costs®,
Dec 5 p 68
Plate Nose Hand Truck, RapidsStandard Co., Inc., Aug 8 p 75
Portable Conveyor, E. W. Buschman Co., Aug 8 p 75
Rack Conveyors, Rack Engineering Co.®, Nov 14 p 100
Racks Handle Heavy Material
Economically at Rack Engineering Co.®, Oct 24 p 51
Rapid -Roller Conveyor, RapidsStandard Co., Inc., Aug 8 p 74
Reduction in Machine Stock Numbers Claimed by Quartermaster
Corps, Oct 17 p 162
Shop Lifter, Domestic Industries,
Inc., Aug 8 p 75
Side-Mounted Motor Truck, Towmotor Corp., Aug 8 p 73
Swivel Bolster, Mercury Mfg, Co.®,
Aug 8 p 74
Tension Brake, Linderman Devices, Inc., Aug 8 p 76
Ten-Ton Truck, Elwell-Parker
Electric Co., Aug 8 p 76
Ten-Ton Truck, Elwell-Parker
Electric Co., Aug 8 p 76
Track Shifter, Templeton, Kenly
& Co., Aug 8 p 76
Traiter Undervariage, Union
Metal Mfg, Co.®, Aug 8 p 73
Truck Crane, Milwaukee Hydraulic Corp.®, Nov 14 p 100
Two-Ton Electric Hoist, Yale &
Towne Mfg, Co.®, Aug 8 p
75
Unloader, Towmotor Corp.®, Aug
8 p 73

75 Unloader, Towmotor Corp.*, Aug 8 p 73 Unscrambling Table, Island Equip-ment Corp., Aug 8 p 75

Mathers, F. C., and Martin, E. L.: Copper Stripping Methods, Sept 19 p 65

Mauk, A. K.: Aluminum Flux, Oct 24 p 67

McAleer, H. J.: Liquid Polishing and Buffing Compounds, July 25 p 60

McCurdy, R. J., and Farley, R. W.: Electric Furnace in Production of Openhearth Type Steels, Dec 19 p 66

McKee, Arthur G., & Co.: Enters Into Agreement With British Industry, July 18 p 148 Sales Up, Sept 26 p 167

McKenzie Engineering Co.: Chip Separator*, Nov 28 p 82

McMullen, T. A., and Quick, J. H.: Standard Systems—Vital Aid to Management*, Dec 26 p 48

Air Collet*, Aug 29 p 61 Air Valve*, Aug 22 p 68

Meadows, John J.: Tooling for Tapers*, July 18 p

Mechanical Pouring Unit Handles 11 Tons Per Hour, by J. R. Shepard and W. J. Olson*, Dec 5 p 77

Mechanics Engineering Co.: Shielded Clamp, Oct 24 p 68

Meehanite: Test Bar Data v. Casting Properties, Sept 26 p 70

Melting Rimmed Steel in the Elec-tric Arc Furnace, by E. S. Kopecki*, Sept 26 p 62

Mercury Mfg. Co.: Swivel Bolster*, Aug 8 p 74

Metal Lath Manufacturers Assn.: FTC Charges That Industry Fixes Prices Denied, Sept 26 p 90

Metal Powder Assn.: Officers Elected, Dec 5 p 126 Revises Powder Standards, Aug 29 p 133

Metal Treating Institute: Elects Officers, Dec 5 p 148

Metallizing:
(See Cleaning and Finishing)

Metallizing Engineering Co.: Metallizing Gun*, Sept 19 p 68

Metallurgical Development of Ma-terials for Turbosuperchargers and Aircraft Gas Turbines, by W. L. Badger*, (2 Parts), July 25 p 40; Aug 1 p 60

Metallurgy:
Carnegie-Illinois Adopts Graduate
Program for Workers, Oct 10
p 168
Caterpillar Establishes 2-Yr Sheet
Metal Training Course*, Oct
24 p 109
Custody of Resources Held by
Metallurgists, Says Tower, Nov
28 p 118
Dissociation Pressures of Metal

Metallurgists, Says Tower, Nov 28 p 118
Dissociation Pressures of Metal Oxides, Sept 26 p 61
Drexel Institute Adds Metallurgical Courses, Aug 22 p 147
Electrons, Atoms, Metals and Alloys, Nov 28 p 64
Identifying Metals; Quick Methods, Oct 17 p 58
Soviet Metalworking Books Now Available for U.S. Translation, Dec 26 p 129
Strain Analysis by Photogrid Method®, Sept 12 p 50

Metals Refining Co.:
Greater Output, New Developments in Powder Metallurgy
Predicted by Drapeau, Dec 12

Metron Instrument Co.: Hand Tachometer*, July 25 p 65 Overspeed Tachometer*, July 18 p 76

Mexico:
Consolidada to Expand Ingot and
Rolling Capacity*, Sept 26 p
121
Markets for U.S. Exports Will
Continue to Increase,
Guijarro, Dec 12 p 136B

Meyers, F. W., Jr.: Welding Precious Metals*, Aug 22 p 59

Michiana Products Co.: Electronic Frequency Converter for Melting Units*, Nov 7 p 57

Michigan Chrome & Chemical Co.: Rack Coating, Dec 5 p 90

Michigan Tool Co.: Lead Comparators for Gear Pro-duction*, Dec 26 p 70 Speed Reducers*, Oct 31 p 59

Military Equipment:

AAF Studying Weapons Said to

Dwarf Atomic Bomb, Sept 19

p 126

Rail Program Outlined by Mili-tary Officials, Nov 7 p 153 Ribbon Parachute Designed by AAF*, Aug 1 p 99

Miller, C. D.: Fuel Studied With High Speed Camera, Dec 5 p 86

Millers Falls Co.;
Blade Tension Device, Tensiometer*, Oct 24 p 56

Millholland, W. K., Machinery Co.: Drilling and Tapping Unit*, Sept 12 p 78

Milling:
Bench Mill, Aircraft Machinery
Corp.*, July 11 p 67
Continuous Milling Machines,
Davis & Thompson Co.*, July
4 p 77

Davis & Thompson Co.*, July 4 p 77
Cutter Guard, Roll Away Skate Co., July 25 p 64
Duplex Machine, Sundstrand Machine Tool Co.°, Nov 28 p 78
Face Mill, Kennametal, Inc.*, July 25 p 63
Hydromatic Machines, Cincinnati Milling Machine Co.°, July 11 p 67
Knee-and-Column Type Machines, Cincinnati Milling Machine Co.°, Sept 12 p 78
Knee-Type Milling Machines, Kearney & Trecker Corp.*, July 11 p 66
Mill Type Motor Standards, Oct 10 p 73
Rotary Thread Mill, Cross Co.*, July 11 p 67
Special-Purpose Mill, Snyder Tool & Engineering Co.*, Sept 12 p
Traveling Head Machine, G. A.

Traveling Head Machine, G. A. Gray Co.*, July 4 p 77
Vertical Milling Machine, Kent-Owens Machine Co.*, July 11 p
67

Milwaukee Cock Grinding Machine Co.: Valve Grinding Machine, Nov 28 p 80

Milwaukee Hydraulic Corp.: Truck Crane*, Nov 14 p 100

Mine Safety Appliances Co.: Heat Block for Industrial First Aid, Oct 10 p 80

Mineral Wool Insulations Co.: Constructs Plant, July 4 p 92

Minerals:
Conservation of Raw Material Reserves Is National Problem,
Says Davidson, Dec 19 p 168
Data Now Available on Detectors, Aug 8 p 138
Follansbee Plans High Silicon
Output, July 4 p 119
Reports Available on Investigation
Results of Deposits, Oct 10 p
152

Synthetic Spinel Used for German Bearings, July 18 p 64

Miniature Precision Bearings: Angular Contact Bearings, Oct 10 p 77

Mining:
British Coal Mines' Transfer to
National Ownership Due Jan. 1,
Dec 5 p 162
Coal Miner Picture Greatly Distorted, Says Sykes, Dec 19 p
120
Frick Opens Robena Mine as Supplement to Coking Coal Reserves, Sept 19 p 98
German Coal Planer Details Disclosed by U.S. Bureau of Mines,
Dec 26 p 140
Hudson Bay Mining & Smelting
Co. Operations at Flin Flon,
Canada*, Aug 22 p 105
New York Ore Miners Still Out
on Strike, July 11 p 98
New Zinc Mines Subsidized, Aug
22 p 116
Operators Fear Permanent Government Occupation of Coal Mines,
July 25 p 99
Oxygen Torch Speeds Blast
Holes*, Dec 19 p 64
Reports Available on Investigation Results of Mineral Deposits, Oct 10 p 152
Republic Steel Challenges Unionization of Coal Foremen, Nov

Safety Code Set Up for Seized Coal Mines, Sept 19 p 150 UMW Now in Position To Obtain Contract for Supervisory Men in J&L Dispute, July 4 p 112 Western Metals Mines Wage Contracts Off, July 11 p 112

Miskella Infra-Red Co.: Infra-Red Heater, Heatolier*, Dec 12 p 84

Mitchell Mfg. Co.: Fluorescent Lights, Aug 22 p 70

Moak Machine & Tool Co.: Two-Spindle Borer*, Nov 28 p

Modern Collet & Machine Co.: Feed Tubes, Sept 5 p 67

Modern Material Handling Ideas for Cutting Costs, by N. L. Davis*, Dec 5 p 68

odern Products, Ltd.: Pilot Valve*, Aug 22 p 67

Moffett, L. W.: Freight Rise Means 14-Pct Jump for Iron and Steel, Dec 12 p

Republican Congress Heralds Re-turn of Free Enterprise, Nov 14 p 132

Molding:
Molding Alloy, Trethaway Associates, Sept 26 p 81
Semiautomatic Molding Machine,
Watson-Stillman Co.*, Oct 3 p

Molybdenum:
Melting in the Vacuum Arc*, Nov
28 p 65 Semiquantitative Tests for Moly in Steel, Oct 3 p 41

Monarch Machine Tool Co.: Special Lathe Produces Precision Leadscrews*, Aug 1 p 58

Moore, A. K.: Melting of Rimmed Steel, Dec 19 p 66

Moore Co.: Pressure Blowers*, Dec 12 p 81

Moore, H. F.: Strengthening Metal Parts by Shot Peening*, (2 Parts) Nov 28 p 70; Dec 5 p 81

Moore Special Tool Co., Inc.: Leaf Taper Gages*, Nov 7 p Parallel Setup Blocks*, Sept Parallel p 68

Morganite Brush Co.: Liquid Meter Valves*, Aug 22 p 68

Morse Mfg. Co., Inc.: Drum Cradle Truck*, Oct 10 p 78

Moseback Electric & Supply Co.: Power-Feeder Switch*, Aug 1 p 69

Mosley Mfg. & Sales Co. : Floating Tool Holder*, Dec 26 p

Moss, R. Y., and Linxweiler, C. J.: Production Experience Proves Economy of Crush Grinding*, Aug 29 p 34

Motch & Merryweather Machinery Co.: Metal Sawing Machine*, July 11 ew Swiss Machine Tools Ex-hibited*, Dec 12 p 116

Motock, G. T.:

German Beryllium Production and
Uses, Ang 1 p 66
Vacuum Melting in Germany*,
Dec 12 p 64

Motor Generator Corp.: Electroplating Generators*, Dec 5 p 89 Lift Truck Battery Charger, Dec 12 p 81

Motor Wheel Corp.: Earnings, 1946, Sept 12 p 156

Motors: CPA Revises Estimates of AC Motor Shipments, Aug 29 p 105

Commutator Head for Lift Truck Motors, Automatic Transporta-

Commutator Head for Lift Truck Motors, Automatic Transportation Co., Aug 8 p 73
Low Inertia Motor, Transcoil Corp.*, Aug 1 p 67
Magnetic Starters, Federal Products Co., Aug 1 p 68
Midget-Size Hydraulic, Superdraulic Corp.*, Oct 31 p 59
Mill Motors Feature Higher Ratings*, Oct 31 p 55, 59
Mill Type Motor Standards, Oct 10 p 73
Unit-Cooled, General Electric Co.*, Oct 31 p 59
Valve Hole Machine, Defiance Machine Works, Inc.*, Nov 28 p 78
Veriable Speed Drive Supportant

Machine Works, Inc.*, Nov 28 p 78
Variable Speed Drive, Submarine Signal Co., Oct 31 p 59
Westinghouse Announces New All-Steel Electric Motor*, Sept 26 p 120
Westinghouse to Build Giant Electric Motors, Dec 12 p 136B

Muir Machine Tools, Ltd.: Cork Slab Foundation for Heavy Machine Tools*, Sept 19 p 64

Murray, D. J., Mfg. Co.: Core Grinder*, Sept 26 p 82

Mystic Iron Works:

Denies New-Management Rumor,
Oct 17 p 126
Everett, Mass., Furnace Now in
Action, Dec 19 p 109

N

Nails: (See Fasteners)

Nankee Aluminum Paint Co.: Aluminum Paint, Dec 5 p 90

Nathan, Robert R.: Report Declared Unsound Economics, Dec 26 p 74 Study Claims 21 Pct Wage Boost Possible*, Dec 19 p 118

National Acme Co.: Automatic Chucking Machine*, July 11 p 65

National Assn. of Cost Accountants: Sees Buyer's Market Sooner Than Expected, Nov 7 p 98

National Assn. of Manufacturers: Campaign to Reform U.S. Patent System, Oct 17 p 166 New Liberal Labor Program Announced, Dec 12 p 120

National Assn. of Power Engineers: Plans Improvements in Diesel Design to Meet Threat of Gas Turbine*, July 4 p 144

National Bureau of Standards: Resinous Sealants for Porous Castings, Nov 14 p 90 Thompson Named Chief of Metallurgy Section*, July 18 p 146

National Carbon Co.: Carbon and Graphite Elect Furnace Electrodes, Dec 19 Electric

National Diamond Hone & Wheel Co.: Metal Powder Press*, Oct 17 p

National Electric Welding Machine Multiple Spot Welder for Rail-road Cars*, Sept 5 p 49

National Founders Assn.: I. R. Wagner Elected President, Nov 14 p 194

National Housing Agency:
Amends Definition of New Producer of Cast Iron Soil Pipe and Fittings Amended, Oct 17 p 109
Bonus Plan Launched to Increase Pig Iron Output, Sept 26 p 109

p 109

Bonus Plan Praised, Oct 10 p

165
Building Program May Fail Despite Vast Authority of Expediter, Oct 31 p 68
California Tops Nation in Nonhousing Construction Permits, Nov 14 p 110

Factory-Built Houses Using Half Aluminum Sheet and Extrusions Planned, Oct 24 p 106 Liquidation of Emergency Controls Seen, Dec 12 p 116A Names Al. Levinson Technical Director, July 4 p 150 Premium Payment Plan Has Addition of 16 Items, Nov 16 p 108
Premium Payment Plans on Building Materials to Remain in Effect, Nov 21 p 121
Sheet Premium Plan Due; West to Benefit, Nov 7 p 108
Soil Pipe Makers 7 p 108
Soil Pipe Makers 7 to Cet 10 p 123
Some Priority Items Dropped, Factory-Built Houses Using Half

p 123 Some Priority Items Dropped, Nov 28 p 117 Will Investigate Black Market Oct 31 p 94

National Industrial Council:
Werntz Named Chairman Public
Relations Committee, Manufacturing Trades Group, Oct ufacturing 24 p 110

National Machine Tool Builders' Assn.:
Assn.:
Exports of Machine Tools SeptDec 1945, Jan-June 1946, Aug
8 p 105
Officers Elected for 1946-47, Oct
17 p 112
Unfilled Orders Continue Downward Trend, Nov 28 p 124

National Metal Congress and Exposition: Program and Exhibitors*, Nov 14

p 82 Program of 79 Technical Sessions at Annual Meeting, Nov 7 p 142 Quality Control and High Pro-ductivity Stressed at Technical Sessions*, Nov 28 p 52

National Metal Trades Assn.: Convention Favors Repeal of Wagner Labor Act, Nov 28 p 152

National Pneumatic Co.: Automatic Water Ejector*, Aug Automatic 22 p 67

National Screw Machine Products
Assn.:
Figures Fail to Disclose Signs of
a Business Setback, Says
Werntz, Nov 21 p 140

National Society of Professional Engineers:
Studies on New Labor Legislation
Being Made, Dec 26 p 112

National Steel Corp.: Net Income, Third Quarter, Nov 7 p 101

National Supply Co.: Cost Reducing Program for a Job Shop*, Sept 26 p 56

National Tool & Die Manufacturers ational Tool & Die Manufacturers Assn.: Convention Proceedings; Officers Elected, Nov 7 p 82 Sees Expansion Trend for Special Tooling to Reduce Labor Cost, Aug 15 p 138

Aug 15 p 138

National Tube Co.:

Develops Continuous Seamless
Pipe Mill, Aug 29 p 98

Expands Gary and Lorain Plants,
July 18 p 146

Hot Stretch-Reducing of Seamless
Pipe, Dec 5 p 155

Record Output Revives Old Steel
Mill Custom, Nov 21 p 136

Stretch-Reducing Seamless Tubing, Dec 12 p 62

Sued by Union for \$120 Million
Walking-Time Pay, Dec 12 p
122

To Consolidate Gary and Ellwood City Plants, Aug 8 p 104B

Navy Dept.:

Better Bat Bomb, Oct 31 p 96

Electric Catapult Launches Navy
Planes, Sept 12 p 140

Reports Minute Loss in Granting
War Loans to Contractors, Oct
3 p 86

Research Program Locking

3 p 86
Research Program Looking
Toward Discovery of New Heat
Resistant Alloys, Aug 22 p 95
World's Largest Centrifuge
Planned for Supersonic Study,
Oct 3 p 120

Nelson, Donald M.:
Appointed by Director of Reconversion to Study Standby Plants,
Aug 8 p 109
Reveals Basic Struggles Between

Pre We

Nonfe

Tde

Sel

Nonf

Br

Co

Co

E

Ju

M

0

P R

W

0

Off

Of

Of

eveals Basic Struggles Between WPB and Military in His "Arsenal of Democracy," Sept 12 p 145

Nelson, T. L.: Carbon and Graphite Elect Furnace Electrodes, Dec 19 65 Electric

Netherlands: emeriands: Aluminum Output Resumed, Sept 12 p 158 Postwar Holland Embarks on In-dustrial Recovery Plan*, Nov 21 p 110

Abrasive Reduces Grinding Costs, by John Anthony*, Nov 21 p 56

New Binders Improve Core Per-formance, by H. L. Gebhardt*, Dec 26 p 66

New Books: (See Book Reviews)

New-Field Machined Parts Co.: Fly Cutters*, Aug 29 p 62

Heat Treating Atmosphere Producer, by A. G. Hotchkins and H. M. Webber*, Nov 21 p 48

New Lathe Produces Precision Lead-screws, by H. E. Linsley*, Aug 1 p 58

New Surface Treatment for Alum-inum, by J. Anthony*, Dec 5 p 64

Nickel: Canadian Production, 1st Five Months 1946, Aug 22 p 116; August, Nov 7 p 118; September, Dec 12 p 117 Imports Climb in October, Dec 26 p 115

International Nickel of Canada Increasing Output, Oct 24 p 114

Price Not Yet Established, Dec 26 p 118 Prices Increased by International Nickel, Nov 28 p 126 Wartime Applications Continue Expanded Use, Dec 5 p 150

Niles-Bement-Pond Co.: Gage Control Unit*, Sept 5 p Temperature Compensator*, Aug 15 p 66 Workers Return After Company Offers Pay Increase, Aug 15 p

Nilsson Electrical Laboratory, Inc.: Pipe Locator*, Aug 15 p 68

Nonferrous Metals:
Average Prices, October, Nov 7 p
118; November, Dec 5 p 132
Bauxite for Reynolds Metals Co.,
July 18 p 116
British Consumption, Third Quar-

British Consumption, Third Quarter, Nov 21 p 124
British Mercury Price Down, Nov 21 p 92
Canada Acts to Reimburse Metal Producers for Exports at World Prices, Nov 28 p 156
Czech Control Board Raises Prices, Oct 10 p 121
German Foils, Light Metals, Bimetals, Being Studied by U.S. Technicians, Oct 3 p 136
Lithium Industry in Germany, Sept 19 p 132
Mercury Prices, Sept 12 p 122
Platinum Prices Up, Aug 15 p

Russia's Come Largely from Caspian Sea Area*, Sept 26 p

Tantung—What It is, How to U.S. Production and Imports:-Chromite, Manganese Ore, Tungsten, Vanadium, 1941-44, Aug 1 p 108
Use It*, Nov 14 p 76
WAA Revises Price Policy, Nov 28 p 126

Nonferrous Metals, Forming and Shaping: Precision Casting Heat-Treatable Copper-Base Alloys*, Sept 19 p 48

Pressure Welding Thin Aluminum
Parts*, Aug 8 p 56
Welding Precious Metals*, Aug 22
p 59

lecon.

Sept

lectric 19 p

Sept n In-Nov

nding

Per-ardt*.

Lead-Aug

Alum-Dec 5

Five 116; ptem-

Dec anada 24 p

Dec

tional

ntinue

5 p

Aug npany 15 p

Inc.:

v 7 p 32 c Co.,

Quar-, Nov

Metal World

Raises

u.S.

many,

22 15 p from

ow to orts:-Ore, 41-44,

Nov

and

eatable

150

Nonferrous Metals, Metallurgy:
Development of Alloys for Turbosuperchargers and Gas Turbines*, (2 Parts) July 25 p
40; Aug 1 p 60
Identifying Metals; Quick Methods, Oct 17 p 58
Selecting Nonferrous Bearing Material*, (2 Parts) Sept 5 p 54;
Sept 12 p 60

Nonferrous Metals, Treatment:
Aging Heat Treatments of 75S
Aluminum, Aug 15 p 49
British Patent Magnesiam Joining Process, Sept 12 p 65
Controlled Atmospheres for Heat
Treatments, (3 Parts) Sept 19
p 42; Sept 26 p 74; Oct 3 p
Topossing 4 Part 111

Processing 4 Pet High-Purity Aluminum Alloy, Oct 31 p 45

Processing 4 Pet High-Purity
Aluminum Alloy, Oct 31 p 45

Nonferrous Metals Industry:
Brass Mill Committee Breaks with
CPA, Sept 19 p 112
Canadian Producers Ask Sharp
Price Rise, July 11 p 108
Copper, Lead and Zinc Ceilings
Up in U. K., July 11 p 112
Euclid Case Plant Bought by
Chase, Sept 12 p 122
Justice Dept. Indicts Vanadium
Companies, Charging Monopoly,
July 18 p 152
Mining Operators Feel Government
Has Misled Them on Premium
Price Payments and New Wage
Contracts, Oct 24 p 80
Monthly Average Prices, June,
July 11 p 112; July, Aug 8 p
118; August, Sept 5 p 116;
September, Oct 10 p 126
OPA Advisory Committee for
Bronze Industry, Oct 10 p 126
Premium Price Plan Retroactive
to June 30, Aug 8 p 118
RFC to Implement Premium Plan,
Oct 3 p 106
Western Metals Mines Wage Contracts Off, July 11 p 112

Norris Stamping & Mfg. Co.: First Auto Wheel Plant to ate on Coast, Aug 29 p 74

North American Aviation, Inc.: Properties of Various Alloys at Sub-Zero Temperatures, Nov 14

Norton Co.: New Abrasive, 32 Alundum, Reduces Grinding Costs*, Nov 21 p 56

Government Goes Into Steel Business, Dec 26 p 86
Own Integrated Mill With 200,000Ton Capaciy Planned, Sept 5 p
147 Norway:

Nox-Rust Chemical Corp.: Rust Remover, Dec 5 p 87

Numatics: Four-Way Valve*, Aug 1 p 68

0

Oakite Products, Inc.: Pickle Inhibitor, Dec 5 p 87 Self-Emulsifying Solvent, Dec 5 p Steam Cleaning Detergent, Dec 5 p 87

Office of Defense Transportation:
Asks CPA Directive for Freight
Car Steel, Aug 8 p 112
Director Johnson Urges Repair
Orders for Freight Cars Be
Kept at 3 Pct Level, Sept 5 p
113
Plan Would Lease Box Cars to

Plan Would Lease Box Cars to Carriers, July 25 p 108 Office of Economic Stabilization: Merges With OWMR, Aug 22*p 150

Office of Metals Reserve:
Rules to Get Stockpiled Minerals
Tightened, Dec 26 p 118
Tin Price to Be Increased, Nov 14
p 146
Zinc Receipts Depend on OMR's
Converting Additional Tonnage
of Ores, Oct 24 p 114

Office of Price Administration:
Advisory Committee for Bronze Industry, Oct 10 p 126
Announces Strict Procedure for Decoutrol Action, Aug 29 p 92
Blasted by Barringer for Failure to Raise Steel Scrap Prices, Sept 19 p 104
Building Materials Suspended From Price Control, Sept 12 p 119
Business Data Available to Lecture

From Price Control, Sept 12 p 119
Business Data Available to Indus-try, Nov 21 p 105
Concrete Reinforcing Bars Extras Raised, Oct 10 p 111
Death Knell of OPA Finds a Cautious Attitude in Industry, July 4 p 107
Decontrol of Jobbing Operations Clarified, Sept 12 p 109
Expected OPA Ruling May Re-quire Output Gain of 15 Pct for Price Relief, Sept 5 p 108
Export Rules Changed, Aug 22 p 111
Halted on Scrap Tie-Ins, Nov 7

Halted on Scrap Tie-Ins, Nov 7

Halted on Scrap Tie-Ins, Nov 7 p 120
Imported Goods to Have No Changes in Ceilings, Sept 26 p 162
Industrial Machines and Equipment Have Pricing Rules Changed, Oct 24 p 103
Keystone Steel Wire Co. Sues to Block Amendment Controlling Scrap, Oct 3 p 83
Liquidation of Emergency Controls Seen, Dec 12 p 116A
New Base Period for Revisions in Prices Important in OPA Revival, July 25 p 95
Pig Iron Regulation Revised to Conform to NHA Bonus Plan, Sept 26 p 111
Rebirth Marked by General Price Increase, Aug 1 p 97
Requirement to File Reports of Change in Prices Now Revoked, Dec 12 p 118
Revived Agency Will Be More Flexible, Aug 8 p 82
Rules to Aid Stockpiling Announced, Sept 5 p 134
Scrap Action Threatens Openhearth Operating Rate*, Sept 19 p 95
Scrap Price Amendment; Complete

p 95 Scrap Price Amendment; Complete Text, Sept 19 p 100 Special Industrial Equipment, Parts, Decontrolled, Sept 26 p

Parts, Decontrolled, Sept 26 p
116
Steel Prices Advanced to Offset
Freight Rate Rise, Oct 10 p 111
Steel Prices Must Be Figured at
Buyer's Destination Resellers are
Warned, Sept 19 p 128
Steel Scrap Price Rise Denied;
Tie-Ins Banned; Cast Up \$4,
Sept 12 p 116
Two Southern Firms Raise Pig
Iron Prices, July 11 p 96
UAW Adds to Confusion Attending Passing of OPA Controls,
July 11 p 72
Wire and Cable Committee's Subcommittee Appointments, Oct 24
p 76

Office of Production Research and Development: Effect of Particle Size on Iron Powder Properties*, (2 Parts) Dec 5 p 72; Dec 12 p 76

Office of Scientific Research and Development: Effect of Tempering on Mechani-cal Properties, (2 Parts) Oct 24 p 44; Oct 31 p 50

p 44; Oct 31 p 50

Office of Technical Services:
German Beryllium Production
Processes Report, Oct 10 p 169
German Novel Precision Grinder
Now Available for Testing, Oct
10 p 124
Report Shows German Measuring
Controls Behind U.S. Practice,
Sept 19 p 146
Reports on Wartime Research in
Metalworking Materials and
Processes, Aug 22 p 66

Office of Temporary Controls: Inventory Rules From 40 Items Removed, Dec 19 p 113 Some War Emergency Agencies to Be Liquidated, Dec 19 p 113

Office of War Mobilization and Reconversion: Eight U.S. Agencies Will Combine in Attack on Nation's Car Shortage, Sept 5 p 107 Merges With OES, Aug 22 p 150

Ouarterly Report Reveals Country Now in Peak Peacetime Pros-perity, July 25 p 148 Takes Action to Get Pig Iron to New England Area, Oct 10 p 112; Oct 24 p 100 To Study Guaranteed Annual Wage Plan, Aug 15 p 74

Ohio Crankshaft Co.: Radiator Production Accelerated by Induction Soldering*, Oct 24 p 55

bil:
Big Inch Line Bids Active, July 25 p 94
Bradford Celebrates 75th Anniversary of Opening of Field, Nov 21 p 150
Bunker Oil Shortage May Require Changes in Eastern Mills' Fuel, Aug 8 p 106
Bureau of Mines Undertakes \$1.5
Million Shale Oil Demonstration', Aug 8 p 111
Cutting Oils, Texas Co., Nov 28 p 82
Protective Value of Industrial Live

p 82 Protective Value of Industrial Lu-bricants*, Oct 3 p 46

Oilgear Co.: Automatic Broaching Speeds Auto Parts Output*, Oct 10 p 66

Oil-Rite Corp.: Bottle Oiler*, Oct 10 p 77 Sight Feed Valve*, Dec 12 p 83

Olson, W. A., and Brenner, A.: Purification of Rhodium Plating Baths, Sept 12 p 69

Olson, W. J., and Shepard, J. R.: Mechanical Pouring Unit Handles 11 Tons Per Hour*, Dec 5 p 77

O'Mahoney, Joseph C.: Highlights WAA Disposal Faults, Oct 3 p 104, 117

Oneida, Ltd.: Electropolishing Process for Silver, Aug 1 p 49

O'Neil-Irwin Mfg. Co.: Brake, Oct 3 p 57

Optimus Equipment Co.:
Continuous Air Dryer*, Sept 19
p 66
Metal Washing Machine*, Dec 5
p 88
Spray Type Washing Machine for
Small Parts*, Dec 5 p 87

Ordnance:
Army Reveals Development of Semi-Armor Piercing Bomb*, July 25 p 142
Navy Precision Gage Lab at Ohio State, Aug 1 p 113
Navy's Better Bat Bomb, Oct 31
p 96

Torpedo Plant Change Near, July

Torpedo Plant Change Near, July 4 p 121 WAA Solicits Bids for Milwaukee Ordnance Plant, Sept 12 p 118 War Dept. Postwar Training Be-gun, July 4 p 88 (See also Military Equipment)

Ore, Ferrous:

Consumption and Stocks of Lake
Ore, June, July 25 p 104; July,
Aug 29 p 104; August, Oct 3
p 83; September, Oct 31 p 98
Czech Imports, January, July,
August, Nov 14 p 157
Decontrolled, Nov 7 p 98
French Mines Concerned Over
Swedish Efforts to Replace Former German Markets, July 25 p
80
French Production and Exports,

French Production and Exports, July, Oct 10 p 117

French Resources, by Region, Oct 10 p 120

Fusion Piercing With Oxygen Torch*, Dec 19 p 64

German Data Revealed by U.S. Bureau of Mines, Dec 19 p 128

Hungarian Production, Estimated Monthly Average, Nov 7 p 95

Italian Economists Ponder Absence of Coal and Iron Ore, Aug 29 p 76

sence of Coal and Iron Ore, Aug 29 p 76 Italian Government Permits Cus-toms-Free Importation of Fer-rous Materials, Oct 24 p 140 Italian Mines and Chief Mines in Mediterranean Basin, Oct 10 p 121E Italian-U.S. Financial Firm Dis-cussed, Oct 31 p 78

Kaiser's Iron Chief Iron Mine Rights Jeopardized by Litigation, Dec 5 p 127

New York Ore Miners Still Out on Strike, July 11 p 98

Philippine Ore Analyzed, Nov 28 p 120

Production and Shipments of Lake Ore, 1946, Aug 15 p 93; Sept 12 p 112

Shipments From Lake Ports Behind 1945*, Sept 12 p 112

Shipments, July, Aug 15 p 97; August, Sept 12 p 112; September, Oct 10 p 109

Steep Rock Iron Mines, Ltd., Makes Moathly Record, Sept 19 p 151

Supply Adequate This Spring, Lake Shipments Indicate, Oct 10 p 109

U. K. Statistics, 1944-May 1946, July 25 p 163; June, Sept 5 p 111; July, Oct 3 p 88; August, Oct 31 p 101; September, Nov 28 p 114

Ore, Nonferrous:

Ore, Nonferrous:

Manganese, Chromite, Tungsten,
Vanadium, Production and Imports, 1941-44, Aug 1 p 108
Premiums to Continue, Aug 15 p
114

Osborn Mfg. Co.: Power Brushes*, July 25 p 63

Otis Elevator Co.: Reports Escalator Orders Up, July 4 p 150

Ovens:
Dielectric Heater for Plastic Preforms, Industrial Heating Div.,
General Electric Co.*, Oct 3 p

Gas-Fired Oven, Despatch Oven Co.*, Nov 21 p 73
Inira-Red Preheater, Delt-Calesco Co.*, Nov 21 p 75
Makers Gave Heat Treaters Thermal Flexibility, Says Gehnrich, Oct 24 p 108
Pull-Drawer Oven, Genrich Oven Div., W. S. Rockwell Co.*, Nov 21 p 73

wen, Louis E.: High Speed Spectrography*, (2 Parts) Aug 8 p 50; Aug 15 p

Oxford Engineering, Inc.: Swiss Type Converter*, Nov 7 p

Oxygen: Impurities Indicator, Baker Co., Inc.*, July 18 p 75
Industrial Uses, Oct 10 p 74
New Process Developed to Cut Melting Time of Pig Iron, Scrap, Sept 26 p 123
Torch Speeds Blast Holes for Ore-Mining*, Dec 19 p 64
Use in Furnaces May Revolutionize Steelmaking, Nov 21 p 104
Use in Steelmaking, Nov 28 p 47

Oxygen in Steelmaking, by E. S. Kopecki, Nov 28 p 47

P-V Test—A New Hardenability Measure, by E. S. Kopecki*, Nov 14 p 66

Pacific Tube Co.:
Buys WAA Plant at Los Angeles,
Nov 21 p 88, 119

Packaging: (See Containers)

Packaging Machinery Manufacturers Institute: Holds Election at Meeting, Nov 7 p 112

Packard Motor Car Co.: Eyes Western Market, Dec 5 p 102

102
Looks for Improvement in Steel
Supply Situation, Nov 21 p 78
\$20 Million Expansion Program
Includes Introduction of New
Truck Line, Nov 21 p 78

Park Iron & Welding Co.: Structural Shapes Produced by Welding*, Oct 17 p 62

Parke, Robert M., and Ham, J. L.: Melting of Molybdenum in the Vacuum Arc*, Nov 28 p 65

Parker Appliance Co.: Tube Coupling*, Dec 12 p 83

Parker-Kalon Corp.:

Patents: British Magnesium Joining Proc-ess, Sept 12 p 65 German Patents Available, Aug 22

p 86 NAM Explains Aim of Campaign to Reform U. S. System, Oct 17 p 166 New System for Filing of Techni-cal Material Sought, July 25 p 128

Patton, B. B.: Special Slide Rule Solves Gage Design Problems*, Oct 24 p 52

Patton, Walter G.: Automakers Say Steel Is Only One of Many Shortages, Oct 17 p 102

Bundy's Cost Saving Plan Adds to Employee Base Pay*, Oct 31 to F

Forecasters Wait in Limbo for Auto Buying Pattern to Jell*, Aug 1 p 104 Shortage of Parts Taxes Ingenuity of Automakers, Aug 29 p 89 Shortages Eliminate \$161 Million from Detroit Projects, Oct 3 p

92 UAW-CIO Rally Plans Indicate Determination to Hold Price Line*, July 18 p 110

Payne Dean & Co.: Miter Gear Unit*, Oct 31 p 60

Pease, C. F., Co.: Reproduction Machine*, Oct 10 p

Peerless Machine Co.: Automatic Metal Saw*, Nov 28 p

Peerless Tool & Engineering Co.: Thread Faster*, Nov 7 p 67

Pellini, W. S., and Queneau, B. R.: Development of Temper Brittleness in Alloy Steels*, Nov 28 p 56

Penn Carbide & Alloy Casting Co.: Punch and Die, Oct 3 p 58

Pennsylvania Salt Mfg. Co.: Metal Cleaners, Dec 5 p 88 Rust Preventive, Dec 5 p 88

Percy, J. W.: Measuring Heating Rate of Steel Slabs, Oct 10 p 74

Pereny Equipment Co.: Electric Kiln*, Nov 21 p 75

Periodic Chart for Electroplaters, by George Dubpernell, Nov 28 p 51

Permanent Mold Castings Offer Production Economies, by Schleicher*, Oct 3 p 42

Permanente Metals Corp.:

Buys Tacoma Aluminum Ingot
Plant, Dec 5 p 132; Dec 12 p

Philippine Islands: Analysis of Iron Ore, Nov 28 p

Analysis 120
120
Excellent Market for AmericanMade Products, Aug 1 p 80
Steel Plant Proposed, Nov 28 p

. S. Group Organizes Shipyard, Sept 19 p 147

Photoswitch, Inc.: Photoelectric Control*, Dec 19 p 83

Photovolt Corp.: Process Timer*, Aug 15 p 67

Pickett & Eckel: Slide Rule, July 25 p 66

Pig Iron:
All Grades Increased Except Charcoal, Aug 1 p 97
Bonus Certifications May Be Filed by Merchant Iron Makers Until Nov. 15, Oct 17 p 109
Bonus Payments Announced, Sept 19 p 108

19 p 108
Bonus Plan Launched by NHA
for Increasing Output; How to
Apply, Sept 26 p 109

Canadian Production, Jan. June 1946, Aug 29 p 100; August, Nov 14 p 204; September, Nov 21 p 112; October, Dec 26 p

21 p 112; October, Dec 26 p 110
Canadian Sales for 1944 Drop 5
Pct; Output, Imports, Exports Increase, Oct 3 p 94
CPA Cancels December Carryovers and Unfilled Certified Orders, Dec 26 p 115
CPA Reduces Purchase Authorizations to Aid Merchant Pig Supply, Aug 22 p 108
CPA to Increase Pig Iron for Brakeshoes, Housing, Sept 19 p 100; Amendment, Sept 26 p 112
CPA's Certification Plan Continued, Sept 12 p 119
Demand, First Half 1947, Estimated at 4 Million Tons, Nov 21 p 106
Foundry Group Meets With CPA to Alleviate Shortage, Aug 22 p 108

108

108
French Prices Increased About 40
Pct, Oct 10 p 117
German Output Up in U. S. Zone,
Nov 21 p 142
German Production in British
Zone, Jan.-July 1946, Aug 22 p

Hungarian Production, 1937, 1942, 1945, First Half 1946, Oct 31

Hungarian Production, 1937, 1942, 1945, First Half 1946, Oct 31 p 91
Hungarian Production, Estimated Monthly Average, Nov 7 p 95
Layoffs Faced by Pittsburgh Non-Certified Industries Due to Shortages, Sept 26 p 110
Makers Will Be Given Price Relief on New England Sales, Oct 24 p 100
Melting Time Cut by New Canadian Process, Sept 26 p 123
Merchant Pig To Be Channeled into Farm Machinery and Building Products, July 11 p 106
NHA Drafts Bonus Plan to Step Up Output, Sept 12 p 110
New England to Get Essential Shipments by OWMR Order, Oct 10 p 112
OPA Revises Regulation to Conform to NHA Bonus Plan, Sept 26 p 111
Output in U. S. Zone Unchanged, Sept 5 p 156
Output Pushed Despite Rise in Material Prices, July 18 p 111C; July 25 p 103
Pittsburgh Coke Ups Price \$2, Dec 5 p 128
Polish Output, First Six Months 1946, Sept 19 p 93
Price Relief for Special Cases Only, Aug 15 p 111
Production, Jan.-July 1946, Sept 12 p 110
Production and Capacity by Districts, May, July 4 p 115; June, Aug 1 p 106; July, Aug 29 p 94; August, Oct 3 p 103; September, Oct 31 p 93; October, Nov 28 p 116
Production Increase Seen by Wyatt, Nov 7 p 107
Rated Orders Expected to Be Ended by Coal Strike, Dec 5 p 127
Two Southern Firms Raise Prices, July 11 p 96

Ratings Extended, Dec 5 p 94
Silvery Pig Up \$2 a Ton, Nov 21
p 124
Two Southern Firms Raise Prices,
July 11 p 96
U. K. Statistics, 1944-May 1946,
July 25 p 103; June, Sept
5 p 111; July, Oct 3 p 88;
August, Oct 31 p 101; September, Nov 28 p 114
WAA Production Plan Rushed,
Aug 22 p 102

Pioneer Engineering Works, Inc.: Apron Feeder*, Nov.14 p 100

Pipe, Tubes:

Big Inch Pipe Line Bidders Requested to Give More Complete Data, Oct 17 p 176
Continuous Seamless Pipe Mill Developed by National Tube Co., Aug 29 p 98
Definition of New Producer of Cast Iron Soil Pipe and Fittings Amended, Oct 17 p 109
Guide Simplifies Gas Cutting of Pipe*, Aug 22 p 58
NHA Will Investigate Possibilities of Black Market Sales, Oct 31 p 94

Northern 'Natural Gas Co. Asks Pipeline Expansion, Sept 5 p 107

Pipeline Expansion, Sept 5 p
107
Pipe Locator, Nilsson Electrical
Laboratory, Inc.*, Aug 16 p 68
Pipeline Listed for WAA Sale,
Aug 29 p 99
Premium of \$10 and \$40 a Ton
Offered to Makers of Soil Pipe
by NHA, Oct 10 p 123
Pressure Losses in Pipe Fittings
Studied*, Oct 24 p 50
Smith Corp. Gets Largest Order,
July 11 p 98
Smith Corp. Sued Says Treasury
Dept. Placed Pipe Order for
Russians, Oct 31 p 96
Soil Pipe Prices Increased, Aug
22 p 99
Soil Pipe Rules Changed by CPA,

Soil Pipe Prices Increased, Aug 22 p 99
Soil Pipe Rules Changed by CPA, Sept 26 p 112
Soil Pipe Shipments Slip Sharply in June, Aug 15 p 99
Surplus Steel Pipe Offered for Sale, July 11 p 135
WAA Tests Possibility of Removing Pressure Pipe From Army Camps, Sept 26 p 94
Youngstown Sheet & Tube Co. Gets Contract, July 18 p 105

Pistoles, Lambert R.: Forging Costs Cut by Improved Die Lubricant*, Oct 17 p 55 Upsetting Tubular Members Sim-plified by Special Grippers*, Aug 15 p 42

Pittsburgh Coke & Chemical Co.: Pig Iron Prices Up \$2, Dec 5 p 128

Pittsburgh Lectrodryer Corp.: Tank Breathers*, Dec 12 p 82

Pittsburgh Steel Co.: Earnings, Third Quarter, Nov 21 p 120

Planning a Plant Layout, by Robert Spurgin, Jr.*, Dec 19 p 73

Plant Equipment:

Plant Equipment:
Acoustic Control Unit, Acoustor
Co., Aug 22 p 70
Air Cylinders, Logansport Machine
Co.*, Oct 10 p 77
Air Gun, Guardair, Algonquin
Parts, Inc.*, Dec 12 p 82
Air Lines Dryer, Gasflux Co.*,
Aug 22 p 69
Air Tool Lubricator, CCA Products Engineering*, Aug 22 p 68
Antivibration Mount, Robinson
Aviation, Inc.*, Aug 22 p 70
Atomizing Nozzles, Spraying Systems Co.*, Dec 12 p 82
Automatic Water Ejector, National
Pneumatic Co.*, Aug 22 p 67
Cable Connector Tool, Burndy Engineering Co., Inc.*, Oct 10 p
79
Cork Slab Foundation for Heavy

Cable Connector Tool, Burndy Engineering Co., Inc.*, Oct 10 p 79
Cork Slab Foundation for Heavy Machine Tools*, Sept 19 p 64
Drum Cradle Truck, Morse Mig. Co.*, Oct 10 p 78
Dry Chemical Extinguisher, Pressurelube, Inc.*, Oct 10 p 80
Dust Collector, Aget-Detroit Co.*, Oct 10 p 78
Electric Blowers, Ace Co.*, Aug 22 p 70
Electronic Wire Recorder, Sound Media, Dec 12 p 84
Filing Cabinets, Lyon Metal Products, Inc., Dec 12 p 84
Fire Control Nozzle, Blaw-Knox Sprinkler Div., Oct 10 p 80
Fire Extinguishers, Randolph Laboratories, Inc., Oct 10 p 80
Fire Extinguishers, Randolph Laboratories, Inc., Oct 10 p 80
Floor Machine, G. H. Tennant Co.*, Oct 10 p 79
Gasketing, Products Research Co., Aug 22 p 68
Heat Block for Industrial First Aid, Mine Safety Appliances Co.*, Oct 10 p 80
Heat Radiation Calculator, Heat-O-Meter, Aug 22 p 69
Hose Couplings, Resistoflex Corp., Oct 10 p 77
Hydraulic Cylinders, Power Plus Products Co., Dec 12 p 82
Hydraulic Jacks, Buda Co.*, Dec 12 p 84
Industrial Truck Battery Charger, Federal Telephone & Radio Corp.*, Dec 12 p 81
Infra-Red Heater, Heatolier, Miskella Infra-Red Go.*, Dec 12 p 84
Insulation Discussion Heard by Engineers Group, Nov 14 p 176

Insulation Discussion Heard by Engineers Group, Nov 14 p 176

Lift Truck Battery Charger, Dec 12 p 81 Lift Truck Motor-Generator Charger, Hertner Electric Co.*,

Ve

Polar Co Ire

Pola

Polis

E

W

E

G

M

M

M P

S

S

Pow

Charger, Hertner Electric Co.*, Dec 12 p 81 Magnetic Shield, Dilley Mfg. Co., Aug 22 p 70 Offset Joints, MagniLastic, Div., of Cook Electric Co.*, Dec 12 p 83

Orifice Computer, Willsonn Computers*, Oct 10 p 80
Planning a Plant Layout*, Dec 19

p 73

ocket-Size Marker, Cushman &

Denison Mfg. Co., Oct 10 p 80

ressure Blowers, Moore Co.*,

Denison Aug.

Pressure Blowers, Moore Co.,

Dec 12 p 81

Printing and Developing Machine,

C. F. Pease Co., Oct 10 p 79

Punch Press Accidents Prevented

With Automatic Feeder, Oct 31

Punch Press Accidents Prevented With Automatic Feeder, Oct 31 p 56
Remote Valve Control, J. A. Zurn Mig. Co., Aug 22 p 67
Safety Cuff, C. Walker Jones Co., Aug 22 p 70
Safety Siphon, Alden Speare's Song Co., Oct 10 p 79
Selenium Battery Charger, Automatic Transportation Co.*, Dec 12 p 81
Solids Interceptor, J. A. Zurn Mig. Co.*, Oct 10 p 78
Spring Lock Washers, Eaton Mig. Co., Aug 22 p 70
Swivel Pipe Coupling, Snyder-Sales Corp.*, Aug 22 p 68
Tank Breathers, Pittsurgh Lectrodryer Corp.*, Dec 12 p 82
Tube Coupling, Parker Appliance Co.*, Dec 12 p 83
Two Way Radio Aids in Plant Efficiency, Nov 21 p 138
Valves, Regulating, Leslie Co., Dec 12 p 83
Valves, Selector, Hydro-Aire, Inc.*, Dec 12 p 83
Valves, Sight Feed, Oil-Rite Corp.*, Dec 12 p 83
Washiountain, Bradley Washfountain Co.*, Dec 12 p 84
Water Coolers, Ebco Mig. Co., Dec 12 p 84
Wheel Puller, Scott & Ewing Co., Oct 10 p 79

Plastics:
Adhesive Outlasts Metal in Fatigue Tests, Nov 14 p 91
Briggs Introduces Laminated Plastics; Many Applications for New Material Seen, Dec 19 p 86
Enamel and Paint Finishes*, Dec 26 p 46
Film Forming Vinyl Resins Assure

Film Forming Vinyl Resins Assure Safe Storage and Shipment of Machinery, Aug 29 p 96 Heat Resistant Insulator, Teflon, Nov 14 p 74 Injection Press, Van Dorn Iron Works Co., Oct 3 p 56 Protective Coating, Standard Associates, Inc., Dec 5 p 89 Resinous Sealants for Porous Castings, Nov 14 p 90 Shori Process for Spraying Plastic Coatings, Aug 22 p 64 Silicone Resin, Dow Corning Corp., Dec 5 p 90

Plates, Sheet and Strip:
British Auto Companies Decry
Sheet Cut, Oct 31 p 101
British Company to Install New
80-In. Cold Reduction Mill,
Nov 28 p 113
CPA Fears Dislocation of Steel
Sheet Distribution, Aug 22 p
143
French Firms Pool Efforts to

French Firms Pool Efforts to Build 66-In. Continuous Strip Mill, Nov 14 p 116
GE Buys Mahoning Valley to Assure Supply of Steel Sheets, Nov 7 p 108
Geographical Center of Hot-Rolled Industry, Oct 24 p 93
Great Lakes to Install Additional Cold-Rolled Capacity, Oct 24 p 72
Kaiser Increases Physics

Kaiser Increases Plates by \$7 Net
Ton, Dec 26 p 104
Republic's Strip Mill Changes to
Increase Youngstown's Output,
July 4 p 119
Seidelhuber Iron & Bronze Works
Starts Campaign to Increase
Western Sheet Allotments, Oct
10 p 90
Sheet Bar Subsidy Now Subject

western Sneet Allotments, Oct 10 p 90
Sheet Bar Subsidy Now Subject of Speculation With Price Control Off, Nov 14 p 130
Sheet Premium Plan Due; West to Benefit, Nov 7 p 108

Dec

Co."

Co.,

Com.

ec 19 an &

P 80

p 79 ented et 31

Zurn Co.,

Sons

Auto-Dec

Zurn

Mig.

yderectro-

liance Plant Co.,

-Aire,

1-Rite

foun-

Co..

Co.,

Fa-

Plas-New 6

Assure nt of

eflon, Iron

Asso-

Cast-

Plas-

64 Corp.,

Decry

New Mill, Steel 22 p

Rolled

itional 24 p

7 Net

Works crease s, Oct

ubject Con-

West

Tack Quality Plate Gets OPA Price Hike, Nov 14 p 202 Vertical Normalizing Furnace for Strip Steel, Dec 12 p 80 Westerners Bristle as Implication Is Made East Should Supply Finished Sheet Metal Products, Dec 5 p 100

Plating Auto Hardware, by Herbert Chase*, Sept 19 p 59

Platinum: Hammer Welding*, Aug 22 p 59 Price Jump May Not Affect In-dustrial Uses, Aug 22 p 116

Plymouth Engineering Co.: Spinner-Riveter*, Sept 12 p 80

Poland:
Coal Output Up, July 4 p 88
Iron and Steel Output for First
Six Months, Sept 19 p 93
Offers Only Substantial Coal Aid
as Export Prospects from Germany Dwindle, July 4 p 94

Polarographic Analysis of Zinc Aluminum Alloys, by F. R. Paola*, Oct 3 p 36

Polishing and Buffing Die Auto Hardware, by F Chase*, Sept 5 p 58 Herbert

Pond Engineering Co.: Tapping Control Unit*, Nov 28 p

Porcelain Enamel:
Coating for Aluminum, Aug 15
p 60
Enameling Fixture, Stanwood
Corp.°, Dec 5 p 89

Porcelain Enamel Institute: Enameling Problems Discussed at Meeting, Oct 24 p 109

Portable Products Corp.: Temperature Recorder - Controller*, Oct 17 p 71

Porter-Cable Machine Co.: Belt Grinder Attachment*, Nov 28 Wet Belt Surfacer", July 4 p 80

Porterfield Mfg. Co.: Machine Vise, Aug 29 p 60

Portman Machine Tool Co.: Variable Speed Transmission*, Aug 1 p 67

Portsmouth Steel Corp.: Earnings, Third Quarter, Oct 31 p 107 Steel Price Relief Granted by OPA Before Inactivation, July 25 p

Potter Instrument Co.: Electronic Counter*, Aug 22 p 69

Powdered Metals: owdered Metals:

Effect of Particle Size on Iron
Powder Properties*, (2 Parts)
Dec 5 p 72; Dec 12 p 76

Extruded Welding Rods*, Dec 19
p 68

Extruded Weiting Rous, p. 68
greater Output, New Developments Predicted by Drapeau, Dec 12 p 118
Heavy Alloy Aids Machine Design*, Sept 19 p 62
Low-Sulfur Sponge Iron Production, Nov 28 p 66
Metal Powder Assn. Revises Powder Standards, Aug 29 p 133
Metal Powder Press, National Diamond Hone & Wheel Co.*, Oct 17 p 74

mond Hone & Wheel Co.*, Oct 17 p 74
Molybdenum Melting in the Vacuum Arc*, Nov 28 p 65
Properties of Sintered Iron-Copper Powders*, Aug 15 p 57
Punch and Compacting Die Combination, Penn Carbide & Alloy Casting Co., Oct 3 p 58
Stainless Steel Powders and Flake, Sept 19 p 138
Statistical Approach in Industrial Research*, Aug 22 p 50
Swedish Sponge Iron Powder Now Available at Lower Prices*, Sept 26 p 114

Power Hacksaw Ills—Their Causes and Cures, by William Short-ell*, Oct 24 p 56

Power Plus Products Co.: Bronze Rotary Pumps*, Dec 12 Hydraulic Cylinders, Dec 12 p 82

Power Transmission:
Chain Type Couplings, Smith
Power Transmission Co.°, Aug
1 p. 70
Combination Starters, Electric Machinery Mfg. Co.°, Oct 31 p 61
Contact Springs Gibson Electric
Co.°, Oct 31 p 62
Current Transfermers, General
Electric Co.°, Oct 31 p 61
Dual Power Supply, Communication Measurements Laboratory,
Aug 1 p 68
Electronic Relay, Automatic Temperature Control Co.°, Oct 31 p
62
Flexible Shafting, Elliott Mfg.

Flexible Shafting, Elliott Mfg. Co.*, Oct 31 p 62
Heavy Duty Controllers, Square D Co.*, Oct 31 p 60
Hydraulic Cylinders, Anker-Holth Mfg. Co.*, Aug 1 p 67
Hydraulic Remote Control, Sperry Products, Inc.*, Aug 1 p 68
Hydroelectric Generator for Russia's Dnieper Dam*, Sept 12 p 109
Magnetic Motor Starters, Federal

Magnetic Motor Starters, Federal Electric Products Co., Aug 1 p

Magnetic Motor Starters, Federal Electric Products Co., Aug 1 p 68
Magnetic Relay, Thomas A. Edison, Inc., Aug 1 p 70
Miter Gear Unit, Payne Dean & Co.*, Oct 31 p 60
Motor-Generator Set, Kato Engineering Co.*, Aug 1 p 67
Multiple Contact Connector, Unichester Co.*, Aug 1 p 68
Oil-Fuse Cutouts, General Electric Co.*, Aug 1 p 68
Oil-Fuse Cutouts, General Electric Endustry to Be Increased by 30 Pct, Aug 15 p 146
Portable Rectifiers, General Electric Co.*, Oct 31 p 61
Power Requirements by Industries, 1939, 1944-46, Nov 28 p 113
Remote Control, Yardeny Laboratories, Inc.*, Aug 1 p 69
Retaining Ring, Waldes Kohinoor, Inc., Oct 31 p 62
Selenium Rectifiers, Electro-Tech Equipment Co., Oct 31 p 62
Solenoid Starter, Allen-Bradley Co.*, Oct 31 p 62
Solenoid Starter, Allen-Bradley Co.*, Oct 31 p 60
Transformer Adjustment, Standard Transformer Adjustment, Standard Transformer Co., Aug 1 p 70
Transformers, Westinghouse Electric Corp.*, Oct 31 p 61
Variable Speed Drive, Submarine Signal Co., Oct 31 p 61
Variable Speed Transmission, Portman Machine Tool Co*, Aug 1 p 67
Voltage Regulators, General Electric Co.*, Oct 31 p 66
Practical Aspects of Electroplating, by C. L. Faust* Aug 8 p 68

Practical Aspects of Electroplating, by C. L. Faust*, Aug 8 p 68

Practical Method of Selecting the Correct Type of Cast Iron, by K. R. Geist and W. A. Hambley*, (2 Parts) Oct 17 p 64; Oct 24 p 58

Practical Method of Specifying Cast Irons, by K. R. Geist and W. A. Hambley, Oct 31 p 46

Precision Apparatus Co., Inc.: Circuit Tester*, Oct 17 p 72 Multirange Tester*, Oct 17 p 73

Precision Casting Heat-Treatable Copper-Base Alloys, by H. Rosenthal, S. Lipson and H. Markus*, Sept 19 p 48

Precision Diamond Tool Co.: Diamond Cup Wheel, Aug 29 p

Precision Forging of High Temper-ature Alloys, by C. H. Smith, Jr. , Nov 28 p 42

Press Work: Material Strength Data for Tool and Die Designers, Nov 28 p

46
Producing Formed Steel Plumbing
Fixtures*, Nov 7 p 54
Side Rule for Calculating Press
Size*, Nov 28 p 69
Wire Forms and Stampings Make
Good Partners*, Oct 17 p 48

Automatic Feeder Prevents Accidents⁶, Oct 31 p 56
Backlog Totals \$39 Million, Sept 5

p 134

Bench Punch Press, Benchmaster
Mfg. Co.*. Oct 3 p 55

Blanking and Forming Press, K.
R. Wilson*. Oct 3 p 55

Converting Surplus Presses by
Arcwelding*. Sept 26 p 65

Die Closure, Junkin Safety Appliance Co., Inc.*, Oct 3 p
58

Dielectric Heater for Plastic Pre-forms, Industrial Heating Div., General Electric Co.*, Oct 3 p

General Electric Co.*, Oct 3 p
58

Electric Hydraulic Press, Dake
Engine Co.*, Oct 3 p 57
Extruding Press for Powder Metal
Welding Rods*, Dec 19 p 68
Hammer Boards, Irwin Mig. Co.,
Inc., Oct 3 p 58
Metal Powder Press, National
Diamond Home & Wheel Co.*,
Oct 17 p 74
Plastic Injection Press, Van Dorn
Iron Works Co., Oct 3 p 56
Punch and Die, Penn Carbide &
Alloy Casting Co., Oct 3 p 58
Punch Press Guard, Dake Engine
Co.*, Oct 3 p 58
Semiautomatic Molding Machine,
Watson-Stillman Co.*, Oct 3 p
56

Sheet Perforating Press, United Engineering & Foundry Co.*, Oct 3 p 55
Shop Press, Rodgers Hydraulic, Inc.*, Oct 3 p 57
Shuttle Feed Accessory. Denison Engineering Co.. Oct 3 p 58
Single-Action Press, Watson-Stillman Co.*, Oct 3 p 55

Pressure Welding Thin Aluminum Parts, by H. E. Linsley*, Aug 8 p 56

Pressurelube, Inc.: Dry Chemical Extinguisher*, Oct 10 p 80

Price, G. H. S.: Heavy Alloy Aids Machine De-sign*, Sept 19 p 62

Prices:
Advance on Alloy Steel Items
Given to Warehouse Resellers,
Aug 22 p 112
Alloy Decontrol Raises Hopes of
Carbon Steel Makers for Price
Rise, Nov 7 p 98
Alloy Steel Decontrolled, Nov 7

Alloy Steels' Low Demand May Keep Prices Down Despite De-control, Nov 7 p 99 Alsifer Increased, Nov 14 p 205 Aluminum Ingot and Scrap Up, July 18 p 116 Aluminum Scrap Continues to Rise, Dec 12 p 126 Aluminum Wire Up, Aug 15 p 114

Antimony, Oct 10 p 126; Nov 14 p 146; Dec 26 p 118
Auto Parts Increased, Aug 22 p 102
Battlefield Scrap Would Require Subsidy for Return to This Country*, Oct 24 p 98
Bedsprings and Metal Beds Increased, Oct 10 p 122
Beehive Coke Prices Increased; Other Ceiling Changes, Aug 29 p 93

Bolt Increase Now Totals 12 Pct Over 1941 Ceilings, July 18 p Over 111A

Bonus Certifications May Be Filed by Merchant Iron Makers Until Nov. 15, Oct 17 p 109 Brand Name Machine Tools Have New Pricing Method, Oct 31 p 108 Brass and D

Brass and Bronze Ingots Raised,

Aug 29 p 108
Brass Screw Machine Products,
Increase 1.9 Pct, Aug 15 p

Britain Raises Copper, Zinc. Nov 28 p 98 British Mercury Down, Nov 21

p 02
British Steel Increases Range Up
to 20 Pct on Cold-drawn Tubes,
July 18 p 80
British Steel, Pig Iron, Increased, Aug 29 p 87
Building Materials Suspended
From Control, Sept 12 p 119

Bushings Raised, Aug 15 p 110
Canada Acts to Reimburse Metal
Producers for Exports at World
Prices, Nov 28 p 156
Canada Raises Auto Ceilings,
Other Increases Reported Imminent, Dec 26 p 104
Canada Retains Ceilings on Base
Metals, Nov 14 p 146
Canadian Base Metal Producers
Ask Sharp Increase in Prices,
July 11 p 108
Canadian Buyers of Farm Equipment Get Dollar Benefits, Oct
3 p 62
Canadian Government Delays
Action to Hike Domestic Metal,
Prices, July 25 p 96
Car Dealers Can Adjust Prices
with OPA Permission, Oct 10
p 84

p 84
Cast Iron Soil Pipe Hiked, Aug 22 p 99
Ceilings Removed from Most Heavy Trucks and All Motorcycles, Oct 10 p 105
Coal Freight Rate Extended, Nov 7 p 78

Coal Freight Rate Extended, Nov 7 p 78
Coke Resale Prices Gain, Sept 5 p 112
Concrete Reinforcing Bars Extras Raised, Oct 10 p 111
Control Elimination Expected to Ease Labor Tension, Improve Distribution, Nov 14 p 127
Copper and Scrap Rise Denied by OPA, Sept 26 p 126
Copper Increased, Nov 14 p 146; Nov 28 p 126; Dec 26 p 118
Copper Shape Tolls Raised, Oct 17 p 130
Curbs Found as No Recovery Aid, by Hardy of Federal Reserve Board, July 18 p 127
Cyanides Decontrolled, Aug 29 p 104
Copper Reserve Board Paires Metal

104 Czech Control Board Raises Metal Prices, Oct 10 p 121 Decontrol Export Sales of Several Metals and Minerals, Oct 31

p 101
Decontrol of Jobbing Operations
Clarified, Sept 12 p 109
Decontrol of Many Miscellaneous
Items, Nov 7 p 99
Dollar Parity Seen as Slight
Boon to Canadian Steel Purchasers, July 25 p 101
Expected OPA Ruling May Require Industry Output Gain of
15 Pct for Price Relief, Sept
5 p 108

15 Pct for Price Relief, Sept 5 p 108 Export Price Rules; Revised Plans Meeting to Answer Ques-tions, Aug 29 p 94 Fabricators See No Runaway Prices But Some Changes Are Due, Nov 14 p 130 Ferroalloys Raised, Dec 19 p 128 Ford Gets Advance of 6 Pct on Automobile Retail Ceiling, Sept 26 p 86

Automonie Retail Cernig, Sept. 26 p. 86

Freight Charges on Warehouse Steel Shipments Clarified by OPA, Aug 8 p. 104A

Freight Rise Means 14-Pct Jump for Iron and Steel, Dec. 12 p. 113

for Iron and Steel, Dec 12 p
113
French Government to Grant
General Rise Covering Wage
Costs, Oct 10 p 121
French Steel Complaints Made,
Nov 14 p 203
French Steel Industry Shows Dissatisfaction Over Metal Increases, Oct 24 p 105
Germany Has Pittsburgh Plus
System Revived by U.S., Dec
5 p 106
Great Lakes Freight Decontrolled
by OPA, Aug 1 p 114
Heavy Melting Steel Scrap Soars
\$5 a Ton, Dec 19 p 130
High Tensile Low Alloy Steels,
Aug 8 p 110
Higher Machine Tool Prices Worry
Industry, Dec 5 p 130
Impact of WAA Machine Tool
Move 90 Days Off, Nov 7 p
116
Imported Goods to Have No

Imported Goods to Have No Changes in Ceilings, Sept 26 p

Increases for British Automobiles, July 25 p 70 Industrial Machines and Equipment Have Pricing Rules Changed, Oct 24 p 103 Industry Must Initiate Own Case for Increases Under Revised OPA. Aug 8 p 82 Industry's Price Increase Restraint on the Whole Pleases Washing-ton, Nov 21 p 82

Lead Producers Still Seek Increase, Nov 14 p 182
Lead Up, Nov 14 p 146; Nov 21 p 124; Dec 19 p 128
Machine Tool Builders See Few Price Changes, Hope Parts Will Ease, Nov 14 p 129
Machine Tool Distributors Decry WAA Sales Action, Sept 26 p 124
Machine Tool Question Causes Dis

Machine Tool Question Causes Di-vision Within WAA, Sept 19 p

Machine Tool Surplus Sales Booming at Cut Prices, Nov 14 p

Machine Tools May Soon Be De-controlled Says Huber, Oct 17 112

Be Reported to OPA, Aug 1 p 102

Magnesium Extras Up at Dow Chemical, Nov 21 p 109 Magnesium Products Price Revi-sion Seen, July 4 p 124 Market Readjustments Based on

Market Readjustments Based on Freight Increases Seen as Pre-mature, July 25 p 102 Mercury Dropped, Sept 12 p 122 Metal Lath Producers Deny FTC Charges That Industry Fixes Prices, Sept 26 p 90 Metal Upholstery Springs In-creased, Sept 26 p 90 New Base Period for Revisions Seen Important in OPA Revival.

New Base Period for Revisions
Seen Important in OPA Revival,
July 25 p 95
New Brice Set Up for BrandName Products, Aug 15 p 108
Nickel Increased by International
Nickel, Nov 28 p 126
Nonferrous Metals Average Prices,
October, Nov 7 p 118
Nonferrous Mining Industry Feels
Government Has Misled It on
Premium Payments and New
Wage Contracts, Oct 24 p 80
Nonferrous Scrap Over Ceiling,
July 18 p 116
Nonferrous Up; Lead 10.50¢. New
York; Zinc 10.94¢. New York,
Nov 14 p 129
OPA Announces Strict Procedure
for Decontrol Action, Aug 29 p
92
OPA Hits Black Market in Iron

OPA Hits Black Market in Iron and Steel Products, Oct 17 p

and Steel Products, Oct 17 p

OPA Says Records Must Be Kept
for Year After Date of Decontrol, Oct 31 p 94

OPA Sets Single Copper Price,
Aug 8 p 118

OPA's Rebirth Marked by General Increases, Aug 1 p 97

Ohio Ferro-Alloys Corp. Announces
Increase for Simanal, Oct 3 p 66
Pig Iron and Bolts Head List of
Changes, Aug 1 p 97

Pig Iron Increases for Special
Cases Only, Aug 15 p 111

Pig Iron Makers Will Be Given
Price Relief on New England
Sales, Oct 24 p 100

Pig Iron Prices Raised by Two
Southern Firms, July 11 p 96

Pig Iron Raised \$2 a Ton by
Brooke, Nov 28 p 112

Platinum Up, Aug 15 p 114

Plumbing Fixtures of Enammeled
Cast Iron Get Increase, Nov 7
p 82

Premium Payment Plan Has 16

Premium Payment Plan Has 16 Items Added by NHA, Nov 14 p 108

Items Added by NHA, Nov 14 p 108
Premium Payment Plans on Building Materials to Remain in Effect, Nov 21 p 121
Premium Price Plan With Subsidies by RFC to Be Pushed, July 18 p 116
Price Recommendation and Increases Enacted, Sept 5 p 98
Rails Raised by Carnegie-Illinois, Dec 19 p 109
Range of \$474 a Ton for Tin Upsets World's Scrambled Tin Market, Aug 8 p 139
Requirements to File Reports of Change Now Revoked by OPA, Dec 12 p 118
Road Machinery Increase Granted, Sept 19 p 109
Scrap Action of OPA Threatens Openhearth Operating Rate*, Sept 19 p 95
Scrap Continues Upward Climb.

Openhearth Operating Kate-, Sept 19 p 95 Scrap Continues Upward Climb, Dec 26 p 120 Scrap Price Amendment; Com-plete Text, Sept 19 p 100

Sheet Bar Subsidy Now Subject of Speculation With Price Con-

Sheet Bar Subsidy Now Subject of Speculation With Price Control Off, Nov 14 p 130
Sheet Premium Plan Due; West to Benefit, Nov 7 p 108
Silver Dips, Dec 12 p 126
Silvery Pig Iron Up \$2 a Ton, Nov 21 p 124
Small Cautions Both Labor and Management on Increases, Nov 21 p 82
Some Machine Tool Prices Up; Others Steady, Nov 21 p 122
Special Industrial Equipment, Parts, Decontrolled, Sept 26 p 116
Spiegeleisen Prices Advanced \$4
Per Ton, Nov 21 p 124
Steel Advanced by OPA to Offset Freight Rate Rise, Oct 10 p 111
Steel Castings Covered Under RPS 41, and Miscellaneous Items, Decontrolled, Oct 10 p 111
Steel Castings Covered Under RPS 41, and Miscellaneous Items, Decontrolled, Oct 10 p 114
Steel Drums Get New Formula.

Items, Decontrolled, Oct 10 p

114

Steel Drums Get New Formula,
Nov 7 p 102

Steel Firms Waiting Impatiently
for Settlement of Price Question, July 11 p 97

Steel Increases Appear Due; Industry Requesting Some Decontrols, Aug 22 p 98

Steel Industry Will Seek No General Price Rise at Present, Grace
Says, Aug 1 p 106

Steel Sheet Decontrol Advocated
by California Chamber of Commerce, Nov 7 p 80

Suppliers Must Retain PR Orders
on Schedules Without Price Discrimination, July 11 p 106

Tack Quality Plate Gets OPA
Hike, Nov 14 p 202

Telephone, Cable Scrap Up, Oct
24 p 114

Tin to Be Increased by Metals
Reserve, Nov 14 p 146

Tin to Be Increased by Metals Reserve, Nov 14 p 146 Tin Export Markups Raised, Oct 24 p 114

Tin Export Markups Raised, Oct 24 p 114
Tin Increase Not Expected Soon,
July 4 p 124; Dec 26 p 118
Tinplate Scrap Decontrolled, Dec 5 p 129
UAW Adds to Confusion Attending Passing of OPA Controls,
July 11 p 72
UAW - CIO Determined to Hold Price Line, July 18 p 110
WAA Revises Policy in Sale of Nonferrous Metals, Nov 28 p 126

WAA to Use Fixed Price Register for Surpluses, Dec 5 p 98
Westinghouse Believes Decentralization Will Combat Rising
Costs, Nov 7 p 105

Westinghouse Believes Decentralization Will Combat Rising Costs, Nov 7 p 105
Wheels Raised by Carnegie - Illinois, Dec 19 p 109
Wire Raised, Aug 29 p 100
Zinc at 10½¢, E. St. Louis, Nov 14 p 146
Zinc Items Raised, Nov 7 p 118
Zinc Oxide Raised, Dec 26 p 118
Zinc, Primary and Scrap, Ceiling
Increased, Oct 17 p 130
Zinc Stocks Unbalanced; Price Relief Rumored, Sept 26 p 126

Priorities:

Priorities:
Aid Granted on Iron Castings and Steel for Wiring Devices, Sept 12 p 88
Aluminum Window Body Asks Vet Housing Aid, Nov 21 p 124
Automotive Parts Disposal; New WAA Procedures, Oct 10 p 84
Canada Inaugurates Priority System for Consumers of American Steel, July 4 p 118
Cancellation of All Ratings for Iron, Steel Items Expected, Nov 28 p 123
CPA Adds Additional Products to List of Inventory Controls, July 25 p 107
CPA Amendment Cuts Buyer Searches Through WAA Stocks, Nov 21 p 84
CPA Establishes Iron and Steel Ratings for Fourth Quarter, Aug 15 p 108
CPA Fears Priority Extension Would Dislocate Sheet Distribution, Aug 22 p 143
CPA Limits CC Rating Orders, July 4 p 115
CPA Rules Subject Housing-Type Nails to English Control Process.

CPA to Revive CC and MM Ratings, Aug 1 p 99
CPA Rules Subject Housing-Type Nails to 50 Pct "Set-Aside," Nov 14 p 143
Demands Made for Cut in Priority Aids to Curb Steel Black Market Activities, Sept 5 p 101

Formal Announcement of Ratings Expected of CPA This Week, Aug 8 p 104C Granted Lead Mines, July 18 p

16 I Steel Ratings Eased, Sept 12

p 118 Housing Program to Get Addi-tional Materials, Oct 17 p 125 Inventory Rules Tightened, Nov

7 p 74
Iron and Steel Priorities' Aid Set
Up for Canada, Aug 8 p 115
Iron Castings and Steel Applications Require Supply Source,
Oct 24 p 103
Munitions Board May Now Issue
HH Ratings, Oct 31 p 98
NHA Drops Some Items, Nov 28
p 117

NHA Drops Some Items, Nov 28 p 117
Pig Iron for Brakeshoes, Housing Items Increased, Sept 19 p 100; Amendment, Sept 26 p 112
Small Business Assured of Aid in Steel, Oct 31 p 70
Steel and Pig Iron Rated Orders Expected to Be Ended by Coal Strike, Dec 5 p 127; Dec 12 p 121

Strike, Dec 5 p 121, Dec 121
Steel Demand Tests Complex Quota System*, Oct 17 p 104
Steel Priority for a Single Industry Refused, Oct 17 p 125
Suppliers Must Retain PR Orders on Schedules Without Price Discrimination, July 11 p 106
Textile Machinery in Three More Groups Loses Priority Ratings, Oct 24 p 76
Urgency Ratings Extended, July 11 p 107

11 p 102

Use of HH and HHH Ratings Explained to Nail Distributors, Aug 22 p 102 Vet Housing to Get Assistance on Steel Castings, Nov 7 p 104 Veteran's Housing Program Aided by Additional Items, Sept 26 p 168

Problems in High Frequency Induc-tion Heating, by E. H. Hulse*, July 18 p 60

Producing Formed Steel Plumbing Fixtures, by H. E. Linsley*, Nov 7 p 54

Production Control for Small Plants by R. A. Trumpis*, July 25

Production Equipment Co.: Stroke Counter*, July 25 p 66

Production Experience Proves Economy of Crush Grinding, by C. J. Linxweiler and R. Y. Moss*, Linxweiler and R. Aug 29 p 34

Production of Ignition Radio Shields, by F. T. Van Syckel*, Aug 29

Products Research Co.: Gasketing, Aug 22 p 68

Progressive Welder Co.: All-Welded Automobile*, Sept 12 n 82

p 82 Automatic Spot Welder Embodies New Principle*, Nov 28 p 67 Battery Powered Aluminum Flash Welder*, Dec 26 p 51

Properties of Sintered Iron-Copper Powders, by F. C. Kelley*, Aug 15 p 57

Protective Value of Industrial Lubricants, by G. H. von Fuchs*, Oct 3 p 46

Pullman-Standard Car Mfg. Co.: Breach of Contract Suit Against Union Won, Dec 5 p 115 Builds New Streetcars, Nov 28 p

140
Multiple Spot Welder for Railroad
Cars*, Sept 5 p 49
Sets Record by Completing 100
Passenger Cars, Aug 1 p 148
Two Way Radio Aids in Plant
Efficiency, Nov 21 p 138

Pumps:
Bronze Rotary Pumps, Power Plus
Products Co.*, Dec 12 p 82
Coolant, Delta Mfg. Div., Rockwell Mfg. Co.*, Nov 28 p 82
Gear-Type Hydraulic Pump, Aro
Equipment Corp.*, Oct 10 p 77
Hydraulic Units, John S. Barnes
Corp.*, Aug 1 p 67

Pyrometer Instrument Co.: Immersion Pyrometers*, Oct 17; Surface Pyrometer*, Oct 17 p 72

Q

Quaker Chemical Products Corp.: Grinding Fluid, Microgrind 70, Nov 28 p 82

Nov 28 p 82

Quality Control:
ASTM Organizes Committee on Quality Control of Materials, Oct 10 p 158

Metal Show Stresses Quality Control and High Productivity*, Nov 28 p 52

Sampling Techniques Applied to Quality Control, Dec 12 p 70

Setting Up for a New Product*, Nov 7 p 58

Statistical Approach in Industrial Research*, Aug 22 p 50

10-Day Quality Control Course at University of Iowa, Sept 5 p

154

Quebec Lead Smelter Syndicate: Plans to Build Smelter, Dec 19 p 128

Queneau, B. R., and Pellini, W. S.: Development of Temper Brittle-ness in Alloy Steels*, Nov 28 p 56

Quick, J. H., and McMullen, T. A.: Standard Systems—Vital Aid to Management*, Dec 26 p 48

Quick Methods for Identifying Met-als, by J. E. Garside, Oct 17 p 58

R

Rack Engineering Co.:
Rack Conveyors*, Nov 14 p 100
Special Racks Handle Heavy M
terial Economically*, Oct 24

Radio Corp. of America: Electronic Vacuum Cage*, Dec 19 p 82 Power Generators*, Nov 21 p 76

Radio Frequency Laboratories, Inc.: Portable Magnet Charger*, Aug Is p 67

Radiography: (See X Ray)

Railroads:
Alco to Begin Mass Production of Diesel Electric Locomotives.

Diesel Electric Locomotives, Sept 19 p 99 Ask Higher Rates on Coal and Coke, July 18 p 150 British Main Railways to Convert From Coal to Oil Firing, Sept 12 p 159

12 p 159
Carriers Adjust Car Shortage to
Ease Steel Deliveries in Midwest, July 18 p 109
Carriers Await 2400 Streamline
Cars, July 4 p 121
Coal Burning Turbine Unit for
Locomotives Will Be Tested in
West, Nov 28 p 150
Diesel Locomotive Adaptable for
Freight or Passenger Service
Built by GM, Oct 24 p 102;
Oct 31 p 96

Built by GM, Oct 24 p 102; Oct 31 p 96 Eight U. S. Agencies Combine in Attack on Nation's Car Short-age, Sept 5 p 107 Erie Orders Additional Rolling Stock from G.M., July 11 p 72 Ex-River Coal Rate Cut Lost to Users Because of New Hike, Aug 1 p 108

Users Because of New Hike, Aug 1 p 108 Foreign Freight Car Orders Must Take Back Seat, CPA Rules, Dec 26 p 88 Freight Car Shortage Rushing To-wards Climax", Sept 12 p 107 Freight Cars Delivered First Months, 1946, Sept 12 p 107 Freight Cars Produced, New Or-ders Received, September and October, Dec 5 p 115 Freight Cars: Statistics for 1945. Sept 19 p 99 Freight Delivery Delayed, July 11 p 80

p 80 Freight and Passenger Car Awar Show Upsurge, Sept 26 p 144

Granted Average 61/2 Pct Average Freight Rate Increase, July 11

Oct 17 p 17 p 72

Corp.: grind 70,

nittee on Materials,

lity Con-uctivity

pplied to 2 p 70 Product*,

Industrial 0 l Course Sept 5 p

licate: Dec 19 p

i, W. S.: Brittle Nov 28

n, T. A.: l Aid to p 48

ying Met-Oct 17 p

4 p 100 leavy Ma-Oct 24 p

". Dec 19

21 p 76

ries, Inc.:

duction of

Coal and

to Convert

hortage to in Mid-

Streamline

Unit for Tested in

aptable for

er Service 24 p 102;

Combine in Car Short

al Rolling ly 11 p 72 ut Lost to New Hike

rders Must

Rushing To-12 p 107 ed First 1 12 p 107 l, New Or-tember and

s for 1945.

ed, July 1

Car Awardı 26 p 144

Granted Average 6½ Pct Average
Freight Rate Increase, July 11
p 76
ICC to Probe Car Shortages, Sept
5 p 113
ICC Says Roads Need Not Furnish Spotting Service at Large
Plants, Aug 15 p 110
Market Readjustments Based on
Freight Increases Seen as Premature, July 25 p 102
Military Officials Outline Program
on Rail Equipment, Nov 7 p 153
More Freight, Less Cars Alarm
Top Management*, Aug 1 p 100
ODT Asks CPA Directive for
Freight Car Steel, Aug 8 p 112
ODT Director Urges Repair Orders for Freight Cars Be Kept
at 3 Pct Level, Sept 3 p 113
ODT Plan Would Lease Box Cars
to Carriers, July 25 p 108
Output of U. S. Freight Cars to
Be Retarded by French Car
Order, July 25 p 100
Prompt Unloadings Urged to Increase Available Cars, Aug 29
p 91
Proposed Reduction in Freight

rease Available Cars, Aug 29 p 91
Proposed Reduction in Freight Rates from Geneva Elicits No Protests, but Develops Requests for Parity, Aug 8 p 86
Pullman Standard Sets Record by Completing 100 Passenger Cars, Aug 1 p 148
Rolling Stock and Carloadings, Aug 1 p 101
Shipments of Track Accessories Improved, Aug 1 p 110
Shortage of Cars Retards Production at Geneva Steel, Sept 12 p 109

Soda Shower for Cleaning Loco-motives*, Sept 12 p 159
TC&I to Use Diesels, Sept 5 p 106
U. S. Steel Application for Lower Freight Rates from Geneva De-velops Ramifications, July 18 p 86

Rand, Charles F., Medal: George M. Humphrey Is Recipient for 1947*, Dec 12 p 114

Randolph Laboratories, Inc.: Fire Extinguishers, Oct 10 p 80

Rannels, Karl:

CPA Says Mills Need Substantial
Increase in Scrap Shipments,
Aug 22 p 97
Justice Dept. Disproves Sale to
American Steel Foundries, July
18 p 106
Nathan's Study Claims 21 Pct
Wage Boost Possible*, Dec 19
p 118
NHA Drafting \$8 a Ton Bonus

p 118 NHA Drafting \$8 a Ton Bonus Plan to Step Up Pig Iron Out-put, Sept 12 p 110 Postwar Holland Embarks on In-dustrial Recovery Plan*, Nov 21

dustrial Recovery Flan , 200 pt 110 Steel Plant Proposed for Philippine Islands, Nov 28 p 120 To Sell \$350 Million Machine Tools on Cut Price Basis, Oct 17 p 113 Wyatt Launches Bonus Plan for Increasing Pig Iron Output*, Sept 26 p 109

Rapids-Standard Co., Inc.: Plate Nose Hand Truck, Aug 8 p Rapid-Roller Conveyor, Aug 8 p

Reconstruction Finance Corp.:
Again Subsidizes Price of Sheet
Bars for Non-Integrated Mills,
Aug 22 p 104
Copper Purchases Ended, Nov 28

p 126
Decontrol RFC Export Sales of
Several Metals and Minerals,
Oct 31 p 101
To Underwrite Output of 19,400
Steel Trussed Houses', Oct 24
p 125

p 125 War Plants Returning 16,300 Tons of Silver to Treasury, Oct 24 p 125

Reconversion:
Canadian Industry Reconversion
Nearly Accomplished, Sept 12 p

147 OWMR Reveals Country Now in Peak Peacetime Prosperity, July 25 p 148 Problems Face Housing Officials, Oct 24 p 109

Retarded by Acute Copper Short-age, Aug 15 p 147

Redmer Air Devices Corp.: Chuck, Indexing*, Aug 29 p 61 Collet Air Chuck, July 25 p 64

Reducing Embrittlement in Electro-plating, by C. T. Eakin and H. W. Lownie, Jr.*, Nov 21 p 69

Reed-Prentice Corp.: Net Earnings Up, July 11 p 110

Refractories: Case Against Emsco Refractories Co. Dismissed, Aug 29 p 133 Refractory Economy v. Combus-tion, Nov 21 p 64

Rehabilitation:
Britain Will Use Credit to Buy
Equipment, July 25 p 102
State Dept. to Press CPA for
Steel for Foreign Reconstruction, July 4 p 116

Rehabilitation, Veterans:
Disabled Workers Have Better
Than Average Records, Survey
Shows, Oct 17 p 179
Handicapped Vets Find Jobs
Through Machinery Changes,
Aug 29 p 99

eparations:
British Get Machinery, Aug 8 p 92
Twenty-One Industrial Plants to
Be Allocated Among Allied Nations, Sept 5 p 82

Reproducing Drawings on Metal, by S. H. Barmasel*, Nov 21 p 62

Reproductions:
Printing and Developing Machine,
C. F. Pease Co.*, Oct 10 p 79
Reproducing Drawings on Metal by
Transfax Process*, Nov 21 p 62

Republic Aviation Corp.: 500 Thunderjets to Be Built for Army Air Forces, Dec 12 p 124

Republic Steel Corp.: Challenges Unionization of Coal Mine Foremen, Nov 14 p 174 Earnings Third Quarter, Oct 31 p

Gadsden Furnace Blown In, Oct

24 p 100
Girdler Anticipates Prosperous Future and Heavy Steel Demand, Oct 10 p 108

Mahoning Valley Residents Tour Plants*, Nov 7 p 101 Presents Medal to Wysor, R. J., Aug 1 p 115 South Chicago Surplus Plant Pur-chased, Dec 26 p 115 Strip Mill Changes to Increase Youngstown's Output, July 4 p 119

Wright Made Sheet and Strip Sales Manager, Nov 7 p 115

Research: (See Science and Research)

Resistoflex Corp.: Hose Couplings, Oct 10 p 77

Revolvator Co.: Barrel Loader*, Aug 8 p 76

Reynolds Metals Co.:
Buys Former Alcoa-Operated
Smelting and Casting Plant at
Newark, O., Dec 19 p 123
High Speed Spectrography*, (2
Parts) Aug 8 p 50; Aug 15 p

To Get Bauxite, July 18 p 116

Riveting:
Spinner-Riveter, Plymouth Engineering Co.*, Sept 12 p 80

Roberts, G. A., Grobe, A. H., and Moersch, C. F.: Tempering of High Alloy Tool Steels, Nov 28 p 58

Robinson Aviation, Inc.: Antivibration Mount*, Aug 22 p 70

Robinson, Harry S., II: AAF's 700,000 Items Indicate Magnitude of Surplus Disposal Task, Aug 1 p 112

Rockwell Mfg. Co.: Coolant Pump*, Nov 28 p 89

Rockwell, W. S., Co.: Pull-Drawer Oven*, Nov 21 p 73

Rodgers Hydraulic, Inc.: Shop Press*, Oct 3 p 57

Roebling's, John A., Sons Co.: Power Plant to Be Built by Rust, Nov 28 p 128

Rogers Machine Works, Inc.: Boring Mill*, July 4 p 79

Roll Away Skate Co.: Cutter Guard, July 25 p 64

Rolling Mills:
Aluminium, Ltd., to Establish 300
Million-Lb Sheet Mill in Britain, Dec 12 p 126
Britain Plans to Expand Aluminum Sheet Output, Dec 12 p

Cemented Carbide Strip Mill Rolls, Sept 5 p 61 Eastern Stainless Steel Corp. Lifts Output to 20 Pct of Sheet Mar-ket*, Aug 15 p 98 French Firms Pool Efforts to Build 66-In. Continuous Strip Mill, Nov 14 p 116

Rolls-Royce, Ltd.: Reports on Auto and Aircraft Work, Aug 15 p 132

Root, B. M., Co.: Multiple Driller, Nov 28 p 77

Rosenthal, H.: Lipson, S., and Markus, H.: Precision Casting Heat-Treatable Copper-Base Alloys[®], Sept 19 p

Rosenthal, P. C., and Udy, M. C.: Boron in Some Alloy Steels, Nov 28 p 64

Ross, John B.:
Designing for Silver Brazing with
Induction Heating*, Dec 26 p

Rothery, William Hume-: (See Hume-Rothery, William)

Royal Oak Tool & Machine Co.: D-S Tool Grinder*, Sept 12 p 77

Royal Products: Live Centers, Nov 7 p 67

Rover Foundry & Machine Co.: Sand Conditioner*, Sept 26 p 82

Rubber:
Free Market Basis on World Rubber Recommended by Goodrich Head, Sept 19 p 148
Koppers Will Begin Styrene Operations at Synthetic Rubber Plant, Kobuta, Pa., Oct 24 p

Probable World Consumption for First Three Postwar Years, Sept 19 p 149 U. S. Rubber Products Plant Moves to Fort Wayne, Sept 5 p 140

Russell, Burdsall & Ward Bolt & Nut Co.: Buys Cooper Screw Mfg. Co., Dec 12 p 96

British Labor Views the USSR Steel Industry*, Sept 12 p 71A Coal, Pig Iron, Steel Production Statistics, 1913-45, Aug 15 p

Excluded from Third Quarter Tinplate Allocations, July 4 n 105
Exposition of Foreign Equipment
to Be Permanent in Moscow,
Oct 17 p 154
Hydroelectric Generator for Dnieper Dam* Sept 12 p 109
Leads the World in High Profit
Margin Says Drucker, Nov 21
p 112
Metalworking Books Now Amit

p 112
Metalworking Books Now Available for U. S. Translation, Dec 26 p 129
Nonferrous Metals Come Largely from Caspian Sea Area*, Sept 26 p 113
Pipe Order for Ukraine Causes A. O. Smith Suit, Oct 31 p 96
Shortages May Wreck Russia's New Five Year Plan*, Aug 15
p 102
Trade with USSR Increasing Page

p 102 rade with USSR Increasing Rap-idly, Dec 12 p 136B

Tries Luring German Technicians Out of Other Occupation Zones, Nov 14 p 114 Underwater High Frequency Tem-pering of Steel Surfaces, Sept 12 p 76

Rust Engineering Co.: To Build Power Plant for Roeb-ling, Nov 28 p 128

Rust Furnace Co.:

Designs Three Slab Heating Furnaces for Bethlehem Steel Co.,

Aug 29 p 105

Ryerson, Joseph T., & Sons: Gagger Bars, Sept 26 p 82

S

Safety (See Management)

. Joseph Lead Co.: Lead Up to 10½¢, New York, Nov 14 p 146

Salvage:

alvage:
Aluminum Dross, Waste Product,
Found to Be Source of Aluminum, Aug 8 p 128
Shipbreaking May Yield 12 to 15
Million Tons of Scrap, July 18
p 103
Wrecking Crews Begin Dismantling of Army and Navy Installations, Sept 5 p 138

Sampling Techniques Applied to Quality Control, by Eugene Goddess, Dec 12 p 70

Sanderson, F.: Canadian Steel Industry Looks Ahead to Self-Sufficiency*, Nov 14 p 136

Sand-O-Flex Corp.: Sanding Wheel*, Dec 26 p 72

Sapphire Products Div.: (See Elgin National Watch Co.)

Saunders, Alexander, & Co.: Melting and Casting Combined in One Unit*, Oct 31 p 49

Scherr, George, Co.: Toll Grinding Fixture*, Sept 5 p 67

Schleicher, William F.: Permanent Mold Castings Offer Production Economies*, Oct 3

Schlitt, F. F., and Armstrong, H. H.: New Method of Coil Annealing, Oct 10 p 72

Schmidgall Mfg. Co.: Plastic Headed Hammer, Nov 7 p 70

Schneeman, Justin G.: The Case for 100 Pct X Ray Inspection of Aircraft Cast-ings*, Oct 10 p 56

Schwitter, C. M.: Triple Alloy Structural Tubing*, Aug 22 p 46

Sciaky Bros., Inc.: Giant Spot Welder*, Oct 24 p 65

Science and Research:
Army Puts Research and Development Division on Top General Staff Level*, Oct 3 p

95
Army Reveals Research Activities of German Scientists in America*, Dec 12 p 116B
British Atom Expert Planning New Machine for Nuclear Research, Nov 14 p 201
Chemical Society Sees Scarcity of Scientists Threatening Research, July 25 p 132
Meticulous Care Recommended by Johnston as Foundation of Industrial Research, Dec 19 p 146

search Program in Advanced Nuclear Physics Inaugurated at Clinton Laboratories, Oct 17 p

Research Service Set Up for Smaller Plants in Detroit Area, Aug 16 p 72

Statistical Approach in Industrial Research*, Aug 22 p 50 Wartime Research in Metalwork-ing Materials and Processes, Aug 22 p 66

Scott & Ewing Co.: Wheel Puller, Oct 10 p 79

Scrap:
Advisory Member Resigns: May
Presage Same Action by Others,
Sept 19 p 98
Aluminum Prices Continue to
Rise, Dec 12 p 126
Automobile Dealers Urged to
Turn in All Scrap, Sept 26 p
84

Automobile Dealers Urged to Turn in All Scrap, Sept 26 p 84

Barringer Blasts OPA for Failure to Raise Steel Scrap Prices, Sept 19 p 104

Barringer Clarifies Institute Position. July 11 p 102

Battlefield Scrap Would Require Subsidy for Return to This Country*. Oct 24 p 98

Billings Off Sharply With Prices Uncertain, July 4 p 126

British Sales, Stocks, August-September, Nov 7 p 118

Cartel Due to Appear if and When Europeans Can Import From U.S., Aug 8 p 90

Cast Iron Up \$4, Sept 12 p 116

Ceiling Set on Prepared Scrap Sales to Dealers, Aug 22 p 97

CPA Allots Low Phos; Denies Overall Plan, Sept 19 p 114

CPA Inventory Control Now in Effect, Oct 24 p 116

CPA Plans to Resurrect Salvage Groups, July 25 p 95

CPA Says Mills Need Substantial Increase in Shipments, Aug 22 p 97

Confusion Reigns at Major Centers, Nov 14 p 128

Consumers Resisting Higher Prices, Nov 28 p 128

Copper of Certain Types Decontrolled, Dec 5 p 132

Copper Controlled by CPA, Nov 14 p 184

Copper Scrap to Be Allocated, Sept 26 p 126

Cross Hauling Becoming Magnified, Says Barringer, Oct 24 p 132

Dealers Advisory Committee Asks Surpluses Be Sold at Sealed

Dealers Advisory Committee Asks
Surpluses Be Sold at Sealed
Bids, July 4 p 163
European Scrap, Army-Generated,
Soon to Be Available to U. S.
Buyers, Dec 12 p 117
Free Market Ushered in by
Hesitancy, Confusion, Nov 14

Hesitancy, Confusion, Nov 14
p 148
GM 1948 Discarded Dies Being
Sold as Scrap, Dec 19 p 88
German Methods for Refining
Aluminum Airplane Scrap, Oct
17 p 54
Government Bureaus Move to
Stimulate Scrap Collection, Oct
3 p 90
Group Prepares Drive for Additional Farm and Industrial
Scrap, July 4 p 115
Heavy Melting Steel Soars \$5 a
Ton, Dec 19 p 130
Industry Awaits Outcome of
Price Plea, Aug 29 p 110
Inventory Control Recommended
by CPA Advisory Committee,
Oct 10 p 114
Junkie's Return to Collection
Would Overcome Shortage, July
18 p 82

Junkie's Return to Collection Would Overcome Shortage, July

Would Overcome Shortage, July 18 p 82
Market Unaffected by End of Coal Strike, Dec 12 p 128
Melting Time Cut by New Canadian Process, Sept 26 p 123
Mills Bite Into Stocks as Shipments Lag, Aug 15 p 116
New Factors Complicate Supply Problem, Aug 15 p 95
Nonferrous Over Ceiling, July 18 p 116

p 116 Normandie to Yield 40,000 Tons*, Oct 10 p 110 OPA Action Threatens Open-hearth Operating Rate*, Sept 19 p 95

hearth Operating Rate*, Sept 19 p 95
OPA Ban on Billet Crop Premium Protested, Sept 26 p 118
OPA Denies Price Increase,
Blasts Dealers, Aug 1 p 120
OPA Denies Price Rise on
Copper Scrap, Sept 26 p 126
OPA Denies Steel Scrap Price
Rise: Bans Tie-Ins, Sept 12
p 116

OPA Price Amendment; Complete Text, Sept 19 p 100
OPA Price Turn-Down Shocks
Industry, Sept 12 p 124
Poor Shipments Indicate Grim
Winter Ahead, Sept 26 p 128
Preparation for Fast Melting in
Electric Arc Furnace, Dec 19
p 66

p 66 rice Question Keeps Dealers From Shipping Scrap, July 11

From Shipping Scrap, July 11
p 102
Price Rise Vote of Committee
Marked by Split Across Industry Lines*, Sept 5 p 100
Prices Continue Upward Climb,
Dec 26 p 120
Remelt Lead Output Increases
Due to Subsidies, Aug 1 p 155
Shipbreakers Can Lease Surplus
Shippards from WAA, Sept 26
p 128: Oct 10 p 128
Shipbreakers' Profit Hopes Dim
As Towing and Labor Costs
Skyrocket, Nov 14 p 138; Nov
21 p 126
Shipbreaking Knots Are All in
Government Red Tape, Not in
Speed of Operations, Dec 19
p 94
Shipbreaking May Yield 12 to
15 Million Tons of Scrap, July
18 p 103
Shipbreaking, Only Immediate
Hope for Ample Scrap, Delayed by Governmental Red
Tape, Nov 21 p 86
Shipbreaking Plan Will Yield
700,000 Tons Steel Scrap, Aug
8 p 104
Shipments Continue at Extremely

700,000 Tons Steel Scrap, Aug 8 p 104 Shipments Continue at Extremely Low Level, Oct 3 p 108 Shipyards Will be Leased by U.S. to Shipbreakers, Sept 19 p 97 Shortage Places West Coast Steel Producers in More Vulnerable Spot During Coal Strike, Nov 28 p 92 Steelmakers Rivet Attention on Precarious Outlook, July 18 p 104

104
Strike Clouds Market Picture for Buyers of Iron and Steel Scrap, Nov 28 p 117
Suit by Keystone Steel Wire Co. against OPA to Block Amendment 8 to MPR4, Oct 3 p 83
Surplus Machines Listed by WAA as Salvage, Aug 29 p 98
Telephone, Cable Scrap Ceiling Prices Up, Oct 24 p 114
10-Point Program, July 18 p 104
Tie-In Sales and Long Hauls Growing, Nov 7 p 120
Timplate Decontrolled, Dec 5 p 129

129
U. K. Steelmaking Consumption, 1944-May 1946, July 25 p 103; June, Sept 5 p 111; July, Oct 3 p 88; August, Oct 31 p 101; September, Nov 28 p 114
WAA Sets Up Accelerated Surplus Program to Help Scrap Shortage, Aug 22 p 108
West Coast Dearth Sends Buyers Hunting Odds and Ends, Sept 12 p 90

nc Price Increased, Oct 17 p

Screw Machines:
Brass Screw Machine Prices Increase 1.9 Pct, Aug 15 p 109
Feed Tubes, Modern Collet &
Machine Co., Sept 5 p 67
Knurling Tool, Barnaby Mfg. &
Tool Co.*, Nov 7 p 69
NSMPA Figures Fail to Disclose
Signs of a Business Setback,
Says Werntz, Nov 21 p 140
One-Dip Degreaser, Detrex Corp.,
Dec 5 p 88
Tooling for Tapers on Screw Machine Parts, July 18 p 68

Arthur, Ltd.:
Automatic Feeding Hopper for No.
2 Centerless Grinders*, Nov 28
p 82 Taper Form Grinding of Piston Skirts*, Oct 17 p 56

Sealed Power Corp.: Strike Settled, Nov 7 p 74

Seidelhuber Iron & Bronze Works: Starts Campaign to Increase Western Sheet Allotments, Oct 10 p 90

Selas Corp. of America:
Bar-End Forge Furnace*, Nov
21 p 74

Selecting Nonferrous Bearing Material, by N. E. Woldman*, (2 Parts) Sept 5 p 54; Sept 12

Selecting the Correct Grinding Wheel, by R. B. Fair*, (2 Parts) Oct 31 p 41; Nov 7 p

Semiquantitative Tests for Moly in Steel, by W. E. Thurn and C. R. Heidbrink, Oct 3 p 41

Seneca Falls Machine Co.: Double-End Drive Lathe*, June 11 p 65

Service Welding Co.:
Tack Welds Prevent Distortion*,
Aug 1 p 57

Setting Up for a New Product, L. S. Whitson*, Nov 7 p 58

Sharon Steel Corp.: Purchases Bopp Steel of Detroit, Sept 26 p 112

Sheet Metal Specialty Co.:

Merges with Follensbee
Corp., July 4 p 115

Sheffield Corp.: Air Gage Attachments*, Sept 5 p 69 Annular Form Grinder*, Nov 28 p 79 Contour Comparator*, July 18 p 76

epard, J. R., and Olson, W. J. Mechanical Pouring Unit Handle 11 Tons Per Hour*, Dec 5

Shepherd, B. F.: P-V Test, Hardenability Measure*, Nov 14 p 66

Shipbuilding:
Construction Nears Record Level,
Lloyd's Register Shows, Nov
14 p 182
Normandia to Vield 40,000 Tons

14 p 182 Normandie to Yield 40,000 Tons of Scrap*, Oct 10 p 110 Philippine Shipyard Organized by U.S. Group, Sept 19 p 147 Scottish Industry Suffers Lack of

C.S. Group, Sept 19 p 147
Scottish Industry Suffers Lack of
Ways, July 18 p 90
Surplus Items Sold, Sept 5 p

Todd and Navy Shipyard Swap Awaits Appraisal of Holdings, July 11 p 80 U.S. Offers to Lease Surplus Shipyards for Shipbreaking, Sept 19 p 97 WAA to Lease Surplus Yards for Use of Shipbreakers, Sept 26 p 128; Oct 10 p 128 Water-Jet-Propelled Boats Devel-oped by Gray Marine Motor Co., Oct 17 p 141

Shipping: (See Transportation)

Shortell, William:
Power Hacksaw Ills—Their
Causes and Cures*, Oct 24 p

Sibley Machine & Foundry Corp.: Drilling Machine*, Sept 12 p 78

Siemens-Halske: Melting in Germany*, Vacuum Meltin Dec 12 p 64

Canada's Output, June, Sept 12 p 122; August, Nov 7 p 118 Ceiling Prices Raised on Wire and Cable Products, Aug 29 and 6

p 108
Electropolishing, Aug 1 p 49
Hammer and Resistance Welding, Aug 22 p 59
Handy & Harman Establishes
Price in Absence of OPA Control, July 18 p 88
Premiums for Distributors and
Resellers Raised, Sept 5 p 116
Price Dips, Dec 12 p 126
RFC War Plants Returning
16,300 Tons to Treasury, Oct
24 p 125

24 p 125

Simmons Machine Tool Corp.: Micro-Speed Shaper*, July 4 p 78

Sims, C. E.: Mechanism of the Carbon-Oxygen Reaction in Steelmaking, Dec 19

Sintering: Properties of Copper-Iron Pow-ders*, Aug 15 p 57

ize Control Co.: Centerless Lapping Machine*, Sept 12 p 80

Sonnta Fati A 14 Tors

Sound Elec

South

Speare

Specia si P

Specti (Se

Sperry

Spitfit Fla

Spong Pro

Spot

Spray

Squa

He

Pr

Stace Stair

Be

Ct E:

F

U

Star

Batt Honored by King George VI, July 18 p 112

July 18 p 112
Celebrates Agreement With
USWA, July 18 p 158
High Frequency Furnace for Cast
Iron*, Dec 5 p 86
Perfects Minute Precision Steel
Balls, July 25 p 149

Smith, A. O., Corp.: Sued by El Paso, Says Treasury Placed Pipe Order for Russians, Oct 31 p 96

Smith, C. H., Jr.: Precision Forging of High Ten perature Alloys*, Nov 28 p 42

Smith, C. W. and Karle, I. Examination of Electro-Cleaned Steel by Electron Diffraction, Oct 10 p 70

Smith, F. H., Mfg. Co.: Gage, Adjustable Length*, Sept 5 Tool Setting Gage*, Sept 5 p 70

Smith, G. W., & Sons: Spatter-Proofing Compound Welding Operations, Oct 24

Smith Power Transmission Co.: Chain Type Couplings*, Aug 1 p 70

Snyder Sales Corp.: Swivel Pipe Coupling*, Aug 22 p 68

Snyder Tool & Engineering Co.: Machine for Drilling Holes in Automobile Frames*, Nov 28

P 77 Rod Balancing Fixture*, Nov 28 p 81 Special-Purpose Boring Machine*, Nov 28 p 78 Special-Purpose Mill*, Sept 12 p 78

Special Turning Machine*, July 11

So You're Designing a New Pr uct! by G. K. Hendrick*, G 31 p 36

Society of Automotive Engineers:
Air Conditioned Cars to Be Designed, Nov 7 p 156; Nov 28 p 159
"buzz Bomb" Power Units Considered at Aeronautical Meeting, Oct 10 p 90
Developments in Commerica Motor Vehicles Told at Meeting Nov 7 p 146
Insulation Discussion Heard by Detroit Section, Nov 14 p 17

Society of Industrial Designers: Elects New Officers, Nov ects 112

Soft Water Rinse Improves Alum inum Finishes, by R. S. He-wig*, July 11 p 58

Solar Aircraft Co.: Low Cost Patterns for Multi-Stag Dies*, Aug 22 p 56 Seam Welding Stainless Stee Foil*, Dec 5 p 76

Soldering:

Aluminum, July 11 p 56 Induction Soldering Accelerate Radiator Production*, Oct 241 Induction Soldering Speeds Kitchen Utensil Output, Speeds

Induction Soldering Speeds U Kitchen Utensil Output, Ser 26 p 169

Irons for Farm or Home Gerating Systems, Hexacon Electric Co.*, Oct 24 p 67

Multioperational Machine, Clinto Machine Co.*, Oct 24 p 66

Tool, Luma Electric Equipme Co.*, Oct 24 p 67

Use of High Frequency Induction Heating*, July 18 p 60

WAA to Offer Surplus Tin-Bas Solder, Oct 10 p 170

Tin-Bas

Sonntag Scientific Corp.: Fatigue Tests Indicate Plastic Adhesive Outlasts Metal, Nov 14 p 91 orsion Testing Machine*, Dec 19 p 82

Pow.

e*, Sept

erge VI,

With

for Cast

n Steel

reasury lussians,

h Tem

L.: Cleaned fraction,

Sept 5

5 p 70

end for

Aug 1

Aug 22

ng Co.: loles in Nov 28

Nov 28

Tachine*

pt 12 p

July 11

w Prodek*, Oct

its Conmmerical Meeting

eard by 4 p 176

S. He

ulti-Stag SS Stee

ccelerate Oct 24

eeds U

me Ge

, Clinto o 66 quipmer

Induction Tin-Bas

Sound Media: Electronic Wire Recorder, Dec 12 p 84

Southern Rhodesia: Possibilities as a Steel Producer, Sept 19 p 140

Speare's, Alden, Sons Co.: Safety Siphon, Oct 10 p 79

Special Slide Rule Solves Gage De-sign Problems*, by B. B. Patton, Oct 24 p 52

Spectrograph: (See Instruments; Testing and (See Instrur Inspection)

Speed Selector, Inc.: Variable-V-Planetary Speed Selec-tor*, Oct 31 p 60

Sperry Products, Inc.:
Hydraulic Remote Control*, Aug
1 p 68

Spitfire Tools, Inc.: Flat Lapping Machine*, Nov 28 p 81

Sponge Iron:
Production of Low-Sulfur Sponge
Iron, Nov 28 p 66
Swedish Powder Now Available
at Lower Prices*, Sept 26 p 114

Spot Testing for Aluminum, by W. E. Thrun and C. R. Heidbrink, Nov 28 p 68

Spraying Systems Co.: Atomizing Nozzles*, Dec 12 p 82

Spring Specialty Co.: Flexible Shait Grinder, Nov 7 p

Spurgin, Robert, Jr.: Planning a Plant Layout*, Dec 19 p 73

Square D Co.:
Combination Resistance Welder
Control*, Oct 24 p 67
Heavy Duty Controllers*, Oct
31 p 60
Precision Snap Switch*, Aug 1
p 69

Be De Nov 21 Stacey-Dresser Engineering Co.: Oxygen for Industrial Uses, Oct 10 p 74

Oxygen for Industrial Uses, Oct 10 p 74

Stainless Steel:
American Cladmetals Co. to Manufacture Clad Stainless Steel, July 18 p 112
Behavior of 18-8 Ti-Stabilized Stainless*, (2 Parts) Aug 8 p 61; Aug 15 p 54

Cutting With the Electric Arc*, Nov 14 p 96
Eastern Stainless Steel Lifts Output to 20 Pct of Sheet Market*, Aug 15 p 98
18-8 Welding Rods Produced by Extruding Powder Metal*, Dec 19 p 68
Flame Cutting by Flux Injection Method*, July 11 p 42
Induction Soldering Speeds Up Kitchen Utensil Output, Sept 26 p 169
Jessop Completes Big Stainless Clad Order, Sept 12 p 111
Jessop Completes Test on Clad Metal Bumpers and Other Accessories, Nov 28 p 157
Pen Caps Drawn Without Annealing*, Aug 8 p 72
Powders and Flake, Sept 19 p 138
Seam Welding Stainless Foil*, Dec 5 p 76

Stand Welding Stainless Foil*,
Dec 5 p 76
U.S. Steel Publishes New Extras, Aug 8 p 114
Welding Inconel and 347 Stainless for Gas Turbine Parts*,
Sept 5 p 46
Welding Stabilized 18-8 Stainless*,
July 11 p 60

Stampings:
Automatic Press Feeder Prevents
Accidents*, Oct 31 p 56
Detroit Shops Begin to Feel Coal
Strike Effects, Dec 5 p 120

Plants Hit Hard by Steel Short-ages, Oct 17 p 76 Wire Forms and Stampings Make Good Partners*, Oct 17 p 48

Standard Associates, Inc.: Plastic Coating, Dec 5 p 89

Standard Electrical Tool Co.: Snagging Grinder*, Nov 28 p 79

Standard Gage Co.: Dial Bore Gage*, Sept 5 p 70 Dial Comparator*, Nov 7 p 70

Standard Systems—Vital Aid to Management, by T. A. McMullen and J. H. Quick*, Dec 26 p 48

Standard Transformer Co.; Transformer Adjustment, Aug 1 p 70

Standards:

MDNA Studying Repair Spees for
Used Tools, July 18 p 114
Metal Powder Assn. Revises
Powder Standards, Aug 29 p
133

Proposed Revision for Grinding Wheels, Aug 1 p 154 Wrench Makers Adopt Simplified Practice Recommendations, Sept 5 p 145

Stanwood Corp.: Enameling Fixture*, Dec 5 p 89

Statistical Approach in Industrial Research, by Arthur Lesser, Jr.*, Aug 22 p 50

Statistical Control of Accidents, by J. M. Howell and Lee Johnson*, July 18 p 56

American Cladmetals Co. to Man-ufacture Clad Stainless Steel, July 18 p 112 Canadian Sales of Ingots for 1944 Drop 5 Pet; Production In-creases, Oct 3 p 94 Electro-Cleaned Steel Examined by Electron Diffraction, Oct 10 p 70

by Electron Diffraction, Oct 10 p 70
German High Temperature Turbine Blade Steels, July 11 p 52
Italian Government Permits Customs-Free Importation of Ferrous Materials, Oct 24 p 140
Priority Applications Require Supply Source, Oct 24 p 103
RFC to Underwrite Output of 19,400 Steel Trussed Houses*, Oct 24 p 125
Small Business Assured of Priority Aid, Oct 31 p 70
Tube Investments Shuts Down Subsidiary Because of Shortage, Oct 31 p 96
Vasco Supreme, New Tool Steel, Features Improved Hot Hardness, Dec 12 p 63

Steel, Forming and Shaping:
Flame Cutting Stainless Steel*,
July 11 p 42
Forging High-Alloy Rounds With
V-Type Dies*, Aug 1 p 44
Producing Formed Steel Plumbing Fixtures*, Nov 7 p 54
Sawing Metal by Electrolytic
Action, Dec 26 p 61
Stainless Pen Caps Drawn Without Annealing*, Aug 8 p 72
Upsetting Tubular Members Simplified by Special Grippers*, Aug
15 p 42

Steel, Metallurgy:
Additions Improve Cast Steels,
July 11 p 57
Alloys for High Temperature
Service*, (2 Parts) Nov 7 p
46; Nov 14 p 92
Aluminum Spot Testing, Nov 28
p. 68

Aluminum Spot Testing, Nov 28 p 68
Behavior of 18-8 Ti-Stabilized Stainless*. (2 Parts) Aug 8 p 61; Aug 15 p 54
Boron in Some Alloy Steels, Nov 28 p 64
Boron in Highly Stressed Steels*. July 4 p 52
Development of Alloys for Turbosuperchargers and Gas Turbines*, (2 Parts) July 25 p 40; Aug 1 p 60
Effect of Changes in Condition of Carbides on Some Properties of Steel, Nov 28 p 54

Effect of Temperature on Carbon-Moly Steel, Aug 22 p 63
Identifying Metais; Quick Methods, Oct 17 p 58
Metallographic Etchant to Reveal Temper Brittleness in Steel, Nov 28 p 57
Molybdenum in Steel; Semiquantitative Tests, Oct 3 p 41
Nitrogen in Bessemer Steel, Oct 3 p 49
Problems Explored at Metal Congress*, Nov 28 p 54
Sulfur in Cast Steel, Dec 19 p 66
Temper Brittleness in Alloy Steels*, Nov 28 p 56
Training Spark Testers, July 18 p 64.
Welding Stabilized 18.8 Stabiless*

Welding Stabilized 18-8 Stainless*, July 11 p 60

Steel, Production:
Acid Electric Slags, Dec 19 p 67
Acid Openhearth Output, 1945,
July 11 p 76
Ample for Peak Motor Car Production in 1948, Predicts Walter S. Tower, July 11 p 128
Bethlehem Steps Up Seattle Production, Oct 24 p 80
Brazilian Steel Mill, Volta Redonda, Now in Operation, Aug S p 104D
British Output, Second Quarter 1946, July 25 p 91
Canadian Firms Seen to Have Full Production in 4 to 6 Weeks, Oct 24 p 99
Canadian Ingot Capacity and Production, 1936-1946, Nov 14 p 137
Canadian Ingots and Castings, Apr

duction, 1936-1946, Nov 14 p
137
Canadian Ingots and Castings, Apr
and May, Aug 1 p 147, June,
Aug 29 p 100: July, Oct 10 p
166: August, Nov 14 p 202;
September, Nov 21 p 114; October, Dec 26 p 110
Canadian Mills Resume Output
With Order Books Closed on
Many Items, Oct 31 p 102
Canadian Output Not Yet Affected by U. S. Coal Strike, Dec 5
p 124
Canadian Production and Shipments by Products and Consuming Industries, April and First
Quarter, July 4 p 118; May,
Sept 5 p 154; June, Oct 3 p
94; Third Quarter, Dec 26 p
110
Canadian Steel Distribution, 1944,

110
Canadian Steel Distribution, 1944,
Aug 8 p 138
Canadian Steel Mills' Operating
Schedules Now at Prestrike
Level, Nov 28 p 114
Carbon-Oxygen Reaction Mechanism in Steelmaking, Dec 19 p
65

Carbon-Oxygen Reaction Mechanism in Steelmaking, Dec 19 p 65
Coal Strike Begins to Curtail Operations in Pittsburgh Area, Nov 28 p 111
Czech Production, August, Nov 14 p 157
Czechoslovakia's Steel Output, January-May 1946, Aug 22 p 86; May-August, Oct 31 p 101
Dominion Steel Strike Hits Fabricators Plants, Aug 8 p 106
Due for Sharp Drop Due to Scrap Shortage, July 18 p 104
Duplexing Process, Oct 17 p 70
Electric Furnace in Production of Open-hearth Type Steels, Dec 19 p 66
Fabricators Supplies Vary; Freight Embargo Seen as Terrific Blow, Dec 5 p 119
Finished Steel Capacity, Production and Shipments, May, July 18 p 111A; June, Aug 22 p 104; July, Sept 19 p 107; August, Oct 17 p 106; September, Nov 21 p 108; October, Dec 19 p 113
Fluidity of Converter and Electric Steels, Dec 26 p 65
France, Monthly Average, 1938, 1945, April and May, 1946, July 25 p 80
French Output Set at Million Metric Tons for 1950, Dec 19 p 98
French Output Shows Advance During July, Sept 12 p 159; August, Oct 10 p 117
Geneva Steel Making Rapid Gains in Resuming Production*, Aug 1 p 109
German Finished Steel and Ingot Output Up in U. S. Zone, Nov 21 p 149
German Output in British Zone Faces Curtailment Due to Coal Crisis, Nov 7 p 84

German Plants in British Zone, Nov 28 p 98 German Production in British Zone, Jan.-July 1946, Aug 22 p 84; July (Revised), Sept 26 p 107

gh Output Hinges on Steady Coal Supply This Winter, Oct 4 p 104

Hungarian Output, 1937, 1942, 1945, First Half 1946, Oct 31

1945, First Half 1946, Oct 31 p 91
Ingots and Steel Castings Production, January 1901-August 1946, Oct 17 p 99
Ingots and Steel Castings Production, June, July 18 p 111D; July, Aug 15 p 105; August, Sept 19 p 106; September, Oct 17 p 108; October, Nov 14 p p 141; November, Dec 19 p 122 Ireland's Estimated Output for 1946 and 1947, Oct 3 p 72
Iron and Steel Output in the Saar, 1934, 1937, 1944, Sept 5 p 146
Italian Capacity, Oct 10 p 121C
Melting SAE 1025 Rimmed Steel in the Electric Furnace; Sequence of Operations, Sept 26 p 64
Mexican Plant to Expand Ingot

Mexican Plant to Expand Ingot and Rolling Capacity*, Sept 26

National Tube's Record Output Revives Old Mill Custom, Nov 21 p 136 Nitrogen in Bessemer Steel, Oct 3 p 49

3 p 49
No Increase in Rated Capacity
Seen in Sale of War Plants to
U. S. Steel, July 4 p 110
Oxygen in Steelmaking, Nov 28 p

Oxygen in Steelmaking, Nov 28 p
47
Pittsburgh Steel Rate Unaffected
Despite Power Strike; Finishing
Hurt, Oct 3 p 87
Polish Output for First Six
Months, Sept 19 p 93
Power Factor v. Input in Electric
Furnace Melting, Oct 17 p 63
Preparation of Raw Materials for
Fast Melting in Electric Are
Furnace, Dec 19 p 66
Ouality Factors Weighed by Electric Steelmakers', Dec 19 p 65
Republic's Strip Mill Changes to
Increase Youngstown's Output,
July 4 p 119
Rimmed Steel Melting in the
Electric Are Furnace*, Sept 26
p 62

Electric Arc Furnace, Sept.

Problem, Dec 5 p 117
Scrap Shortage Places West Coast
Producers in More Vulnerable
Spot During Coal Strike, Nov
28 p 92
Shortage of Railroad Cars Retards Production at Geneva
Steel, Sept 12 p 109
Shortages Slow English Output,
Iuly 25 p 82

tards Production at Geneva Steel, Sept 12 p 109
Shortages Slow English Output, July 25 p 82
Shortages of Some Raw Material Items Hamper Operations, July 18 p 111B
Sodium Fluoride Fumes From Ingots Injurious to Ford Workers, Union Charges, Oct 24 p 70;
Nov 7 p 106
Southern Rhodesia as a Steel Producer Discussed, Sept 19 p 140
Summary of Iron and Steel Products, 1941-45. Sept 5 p 106
Temperature Measurement of Liquid Steel*, July 25 p 52
Total v. Alloy Output, 1939-1946, Sept 3 p 104; Oct 31 p 99
Union Steel Co. to Build Plant for Fabrication of Structural Steel and Plates, Sept 12 p 92
U. K. Statistics, 1944-May 1946, July 25 p 103; June, Sept 5 p 111; July, Oct 3 p 88; August, Oct 31 p 101; September, Nov 28 p 114
Vacuum Melting in Germany*, Dec 12 p 64

Steel, Treatment: Arcwelding Tool Steel, Nov 28 p

Conveyorized Automatic Heat
Treatment*, Nov 14 p 70

Effect of Heat Treatment on Triple Alloy Structural Tub-ing*, Aug 22 p 46 Effect of Tempering on Mechani-cal Properties, (2 Parts) Oct 24 p 44; Oct 31 p 50 Hardenability Test for Quenched and Tempered Steel*, Sept 5 p 62

and Tempered Steel*, Sept 5 p
62
Heat Treating in Combusted Gas*,
Nov 21 p 48
Improving Cutting Properties of
High-Speed Steel, Aug 15 p 64
Measuring Heating Rate of Steel
Slabs, Oct 10 p 74
P-V Test, Hardenability Measure*,
Nov 14 p 66
Reducing Embrittlement in Electroplating*, Nov 21 p 69
Shot Peening in Strenghthening
Metal Parts*, (2 Parts) Nov 28
p 70; Dec 5 p 81
Surface Pyrometer for Steel Slabs
Developed by U. S. Steel*, Oct
24 p 64
Temper Embrittlement of Aircraft
Steels, Aug 29 p 51
Tempering of High Alloy Tool
Steels, Nov 28 p 58
Tool Steel, Vasco Supreme, Features Improved Hot Hardness,
Dec 12 p 63
Underwater High Frequency Tempering, Sept 12 p 76
Steel City Testing Laboratory:

eel City Testing Laboratory: Ductility Testing Machines*, Aug 15 p 65

Steel Co. of Canada, Ltd.: Finds Steel Demand at New Peak Levels, July 11 p 109 Melting Rimmed Steel in the Elec-tric Arc Furnace*, Sept 26 p

62 New Process Developed to Cut Melting Time of Pig Iron, Scrap, Sept 26 p 123

Steel Founders' Society of America: End-Quench Hardenability Test Discussed at Meeting, Sept 5 p

Steel Industry:
Apollo Steel May Be Sold to Midwestern Group, Oct 10 p 114
Armoo Expands at Butler, Pa.,

western Group, Oct 10 p 114
Armeo Expands at Butler, Pa.,
Oct 31 p 98
Armeo Has Plans for \$69 Million
Expansion, July 18 p 162
Auto Makers Get Full Share of
Current Steel Output, It Is
Claimed, Oct 17 p 101
Auto Producers Notified Steel for
Only 4 Million Cars Available
in 1947, Sept 19 p 70
Auto Supplies Critically Short;
Some Shutdowns in Sight, Nov
28 p 112
Automakers Say Steel Is Only
One of Many Shortages, Oct 17
p 102
Automotive Steel May Lag in De-

p 102 Automotive Steel May Lag in De-livery, Nov 28 p 84 Bookings Solid Through '46; Or-ders Squeezed by Backlogs, July 25 p 93

25 p 93 Britain Told Bill for Public Own-ership Will Be Introduced, Nov

Britain Told Bill for Public Ownership Will Be Introduced, Nov 28 p 94
British Company to Install New 80-In. Cold Reduction Mill*, Nov 28 p 113
British Control Board Appointments Received With Some Criticism, Oct 17 p 88
British Control Board Members and Main Duties, Sept 26 p 96

British Control Board Members and Main Duties, Sept 26 p. 96 British Debate Ruhr Steel Nation-alization; Now Running at Loss, Sept 5 p. 149 British Exports to Decline in Last Quarter, Oct 17 p. 90 British Government Plans to Name Permanent Control Board*, Aug 29 p. 102

Permanent Control Board*, Aug 29 p 102
British Iron and Steel Exports Continue to Show Upward Trend, Aug 22 p 100
British Labor Views the USSR Steel Industry*, Sept 12 p 71A
British Nationalization Plans Softened, Aug 29 p 87
British Nationalization Plans Softened, Aug 29 p 87
British Occupation Authorities May Revive Industrial Activity of the Ruhr, Aug 8 p 90
British Plans Revised for Steel Control Board, Sept 12 p 94
British Sheet Shortage Worries Auto Exporters, Nov 28 p 96
British Steel Board Plan to Approve Entire Modernization Plan, Oct 31 p 121

British Steel Head Seeks 2 Million Tons of American Steel*, Oct

Tons of American Steel, Oct 24 p 95
British Worried Over Prospect of Buying Steel Here*, Oct 2

p 96 uyer's Market Sooner Than Ex-pected Foreseen by Austin, Nov

pected Foreseen by Austin, Nov 7 p 98
Canada Looks Ahead to Self-Sufficiency*, Nov 14 p 136
Canada Seeks Larger Share of U. S. Steel, July 4 p 118
Canadian Basic Steel Mills Return to Prestrike Operating Levels, Dec 12 p 114
Canadian Firms Seen to Have Full Production in 4 to 6 Weeks, Oct 24 p 99

Canadian Firms Seen to Have Full Production in 4 to 6 Weeks, Oct 24 p 99
Canadian Ingot Capacity and Production, 1936-1946, Nov 14 p 137
Canadian Mills Resume Output With Order Books Closed on Many Items, Oct 31 p 102
Canadian Production and Shipments by Products and Consuming Industries, April and First Quarter, July 4 p 118; May, Sept 5 p 154; June, Oct 3 p 94; Third Quarter, Dec 26 p 110
Canadian Strike Drastically Reduces Ingot Operating Rate, July 25 p 96
Cement Case Seen Weakening FTC Stand on Steel Basing Points, Oct 3 p 85
Chicago Rate Falls to 75½ Pct in Coal Crisis; Freight Embargo Will Cause Paralysis, Nov 28 p 111
CPA Asks Loan of Consultants to

Coal Crisis; Freight Embargo
Will Cause Paralysis, Nov 28 p
111
CPA Asks Loan of Consultants to
Help Solve Steel Problems, Oct
17 p 103
CPA Chief Predicts Easing of
Steel Situation After September,
Aug 22 p 76
CPA Establishes Iron and Steel
Ratings for Fourth Quarter, Aug
15 p 108
Cleveland Industry Will Be Down
Within Month If Coal Strike
Holds, Dec 5 p 118
Commerce Dept. Study Stepped
Up, May Be Completed in Two
Months, Nov 7 p 76
Construction Awards, July 4 p
121; July 11 p 107; July 18 p
113; July 25 p 109; Aug 1 p
113; July 25 p 109; Aug 1 p
115; Aug 8 p 115; Aug 15 p
111; Aug 22 p 113; Aug 29 p
105; Sept 5 p 113; Sept 12 p
119; Sept 19 p 109; Sept 26 p
123; Oct 3 p 103; Oct 10 p
123; Oct 17 p 127; Oct 24 p
111; Oct 31 p 107; Nov 7 p
121; Nov 28 p 123; Dec 5 p
129; Dec 12 p 123; Dec 19 p
125; Dec 26 p 115
Consumers Agree to Reduce TopHeavy Backlogs, Nov 7 p 102
Cut in Priority Adis to Curb Steel
Black Market Activities Demanded, Sept 5 p 101
Czechoslovakia Faces Huge Task
Under New 2-Yr Plan, Nov 14
p 157
Deliveries Now Being Governed

Under New 2-Yr Plan, Nov 14
p 157
Deliveries Now Being Governed
by Quota System, Dec 19 p 111
Demand, First Half 1947, Estimated at 29 Million Tons, Nov
21 p 106
Dept. of Commerce Div. Making
Broad Study, Oct 3 p 64
Detrola Corp. Acquires Properties
of Andrews Steel and Subsidiaries, Aug 15 p 100
Distributors to Hold Price Line,
July 11 p 96
Earnings Statements Reflect Strike
Costs, Aug 8 p 108
Eastern Stainless Steel Corp. Lifts
Output to 20 Pct of Sheet Market*, Aug 15 p 98
Exporters See No Improvement in
New Accelerated Licensing Plan,
Oct 3 p 88
Exports Hold Own in Ratio to
Production; Quality Steels in
Fore, July 4 p 116
Fabricated Construction Industry
Has Prosperous Future According to AISC Reports, Nov 7 p
80
Fabricators See No Runaway

Fabricators See No Runaway Prices But Some Changes Are Due, Nov 14 p 130 Fabricators' Supplies Vary; Freight Embargo Seen as Terrific Blow, Dec 5 p 119 Finished Steel Capacity, Produc-tion and Shipments, May, July 18 p 111A; June, Aug 22 p

104; July, Sept 19 p 107; August, Oct 17 p 106; September, Nov 21, p 108; October, Dec 19 p 113
Firms Waiting Impatiently for Settlement of Price Question, July 11 p 97
Foreign Funds for Purchase of American Steel Seen Unlimited, July 11 p 95
French, Belgian and Luxemburg Picture, Sept 26 p 96
French Communists Seek Nationalization, Oct 10 p 120
French Firm to Finance Rebuilding of Damaged War Plants, Oct 10 p 116
French 5-Yr Plan Includes Steel Equipment Modernization, Nov 21 p 119

21 p 119
French Industry to Be Controlled
by Trade Association, Chambre
Syndicale de La Siderurgie, Oct

Syndicale de La Siderurgie, Oct 10 p 116
French Mills Lobbying for Possession of Continuous Strip Mills, July 25 p 80
French Modernization by Monnet Plan Specifies Individual Goals for Basic Industries; Sets Steel Output at Million Metric Tons for 1950, Dec 19 p 98
French Price Complaints Made, Nov 14 p 203
French Show Dissatisfaction Over Price Increases, Oct 24 p 105
French Steelworks Begin Unfolding Construction Plans, Nov 14 p 116

ing C an Mills Trail American uipment, Says Hyland*, Aug

grann Mills Trail American Equipment, Says Hyland*, Aug 1 p 113
German Producing Plants in British Zone, Nov 28 p 98
German Steel Dismantling Being Delayed by British Occupation Authorities Despite Potsdam Agreement, Nov 28 p 96
Girdler Anticipates Prosperous Future and Heavy Steel Demand, Oct 10 p 108
Government Bureaus Assailed by Western Steel Users for Lack of Understanding, Oct 31 p 72
Holland Embarks on Industrial Recovery Plan*, Nov 21 p 110
Hungary May Be in Export Market Due to Temporary Reparations Cut, Oct 31 p 91
India's Tata Steel Reports Ingot Output of 1,135,000 Tons, Nov 28 p 118
Ingots and Steel Castings Production Inquiery 1001

Output of 1,135,000 Tons, Nov 28 p 118
Ingots and Steel Castings Production, January 1901-August 1946, Oct 17 p 99
Ingots and Steel Castings Production

agots and Steel Castings Produc-tion, June, July 18 p 111D; July, Aug 15 p 105; August, Sept 19 p 106; September, Oct 17 p 108; October, Nov 14 p 141; November, Dec 19 p 122 ish Steel Co.'s Production Pro-gram, Oct 3 p 72 talian Industry Needs Include Greater Integration*, Oct 10 p 121A

Italian Industry
Greater Integration*, Oct 10 p
121A
Italian-U. S. Financial Firm Discussed, Oct 31 p 78
Italy and Austria Reach Understanding Reports Say, Dec 5 p
144

standing Reports Say, Dec 5 p

Japanese Industrial Empire, Its
Rise and Fall*, Oct 17 p 114

Kaise*r Calls Critics "Scandalmongers Who Deal in Half
Truths," Aug 15 p 109

Kaiser Reported Ready to Bid
on Republic's South Chicago
Works*. Aug 8 p 104B

Labor, Management in Deadlock
on Demands in Canadian Steel
Strike, Aug 15 p 97

Lake Shipping Strike Threatens
to Cut Steel Operations This
Winter, Aug 15 p 96

Lend-Lease Exports of Iron and
Steel Products, 1941-45, by Year
and by Country, Dec 26 p 102

Light Products Rise to 45 Pct of
Total Shipments Made in First
Six Months, Oct 17 p 106

Low Motor Truck Rate from Geneva Stirs Little Interest, Nov
28 p 92

Mahoning Valley Residents Tour
Plants* Nov 2 p 104

28 p 92
Mahoning Valley Residents Tour
Plants*, Nov 7 p 101
Management and Labor in San
Francisco Organize Group to
Bring Steel Sheets to Coast, Francisco Organize Group to Bring Steel Sheets to Coast, Sept 5 p 80 Market Eyed with Caution; Long Range Prospects Good, Oct 10 p 107

Market Readjustments Based on Freight Increases Premature, July 25 p 102

McKee & Co., Enters Into Agreement With British Industry, July 18 p 148

National Tube Expands Lorain and Gary Plants, July 18 p 146

No General Price Rise Will Be Sought at Present, Grace Says, Aug 1 p 106

Norway Planning Own Integrated Mill With 200,000-Ton Capacity, Sept 5 p 147

Norwegian Government Goes into Steel Business, Dec 26 p 86

Packard Looks for Improvement in Supply Situation, Nov 21 p 78

78
Philippine Islands Plant Proposed,
Nov 28 p 120
Pittsburgh Steel Rate Holds Up
Despite Power Strike; Finishing
Hurt, Oct 3 p 87
Plant Expansion in California, July
4 p 90

Plant Expansion in California, July 4 p 90 Plant Maintenance Costs Up in 1945, Dec 5 p 115 Priorities Aid Set Up for Canada, Aug 8 p 115 Priorities Assistance on Castings for Vet Housing Outlined, Nov 7 p 104

Aug 8 p 115
Priorities Assistance on Castings
for Vet Housing Outlined, Nov
7 p 104
Priority Ratings Expected This
Week, Aug 8 p 104C
Priority Ratings for Iron, Steel
Item's Expected to Be Cancelled, Nov 28 p 123
Priority for a Single Industry Refused, Oct 17 p 125
Production Summary of Iron and
Steel Products, 1941-45, Sept 5
p 106
Proposed Reduction in Freight
Rates From Geneva Elicits No
Protests, but Develops Requests
for Parity, Aug 8 p 86
Rated Orders Expected to Be
Ended by Coal Strike, Dec 5 p
127; Dec 12 p 121
Reciprocal Trade Agreement Reflects Tariff Cuts, Nov 21 p 113
Safety Statistics, 1945, Sept 5 p
142
Schedule Cutting Is Steelmakers'

Schedule Cutting Is Steelmakers' Problem, Dec 5 p 117 Scottish Industry Worried About Over-Rationalization, July 11 p

Secretary Wallace Alarmed by Increase in Corporate Mergers and Acquisitions, July 11 p 74
Sharon Purchases Bopp Steel of Detroit, Sept 26 p 112
Sheet Decontrol Recommended by California Chamber of Commerce, Nov 7 p 80
Shipments Better, Inventories Lag, in Pittsburgh Area, July 18 p 111B

in Pi

in Pittsburgh Area, July 18 p
111B
Shipments, of Castings, in 1945,
Topped 1.9 Million Net Tons,
July 18 p 144
Small Denies CPA Will Crowd
Books With Rated Orders in
Fourth Quarter, Sept 12 p 114
Stamping Plants Hit Hard by
Shortages, Oct 17 p 76
Standard Design for Light Gage
Steel for Construction Announced, Nov 28 p 140
Steel Demand Tests Complex Quota
System*, Oct 17 p 104
Swedish Companies Planning Expansions*, Dec 26 p 106
Swedish Government Plans Expansion of Mill Built in Far North
During 1940, Dec 12 p 98
Typical 1942 Auto Used 3500 Lb
of Steel, Aug 22 p 74
U. K. Statistics, 1944-May 1946,
July 25 p 103; June, Sept 5 p
111; July, Oct 3 p 88; August,
Oct 31 p 101; September, Nov
28 p 114
U. S. Steel Application for Lower
Freight Rates From Geneva Develops Ramifications, July 18 p
86
WAA Steel Offering Brings Out

WAA Steel Offering Brings Out
Hungry Buyers; Construction
Projects Increase Structural and
Bar Demands, July 4 p 90
West Coast Battle for More Steel
Goes On With No Evidence of
Success, Oct 17 p 84
West Coast Shortage Will Be Unrelieved Until Geneva Reaches
Full Production, Oct 3 p 68
Westerners Bristle As Implication
Is Made East Should Supply
Finished Sheet Metal Products,
Dec 5 p 100

Where Is the Steel? Oct 17 p

sed on nature,

Agree-dustry, Lorain p 146 ill Be Says,

grated pacity,

es into vement 21 p

ds Up a, July

Up in

lanada,

astings I, Nov

This

Steel Can-

ry Reon and Sept 5

Freight its No

to Be ec 5 p nt Re-

p 113 ot 5 p

nakers'

About

by In-ers and

teel of ded by

s Lag,

1945, Tons,

Crowd lers in p 114 rd by

Gage n An

Quota ig Ex-Expan-North 8 500 Lb

1946, pt 5 p lugust, r, Nov

Lower va De-v 18 p

ruction ral and 90 e Steel

Be Un-Reaches 68

68 lication

Supply oducts,

103
Window Program for Vet Housing
Lags Due to Steel Shortage,
Dec 5 p 146
Zimmerman Casting Plant at Bettendorf Sold, Aug 8 p 151

tendorf Sold, Aug 8 p 151

Steel Industry, Labor:
Briggs Lays Off 7000 Due to Steel Shortage, Oct 10 p 114
Britain's Total Working Population, May 1946, July 25 p 103
Canadian Strike Ends After 81
Days; 100,000 Tons Ready to Move, Oct 10 p 118
CIO Make Final Offer in Canada's Steel Strike, Asks 15½6
Increase, Aug 8 p 106
Employment Gain of 16 Pct for Three-State Region Reported by JSES, Nov 7 p 107
Employment, Hours and Wages, May, July 11 p 98; June, Aug 15 p 100; July, Sept 12 p 105; August, Oct 24 p 93; September, Nov 7 p 95; October, Dec 26 p 97
Guaranteed Annual Wage Plan

uaranteed Annual Wage Plan Studied by OWMR, Aug 15 p 74

74
Inland Steel Container Corp. Workers Agree to End Strike, Aug 8 p 112
J&L Takes Legal Action in Attempt to Rescind UMW Foremen's Contract, July 25 p 98
Labor More Pressing Problem Than Coal in German Steel Production, Aug 22 p 84
No Wage Demands Seen During Current Contract Year, July 11 p 100

100

No Wage Demands Seen During Current Contract Year, July 11 p 100
Pittsburgh Mills Indicate Common Labor as Chief Hiring Problem, Oct 17 p 141
Price Cut Instead of Wage Rise if Facts Support Move Favored by Grace, Nov 7 p 100
Ruttenberg Quits To Go With Steel Co.; Golden Resigns Also, July 11 p 100
Take - Home - Pay, October 1944-August 1946, Oct 31 p 97
Tension to Ease, Distribution to Improve With Controls Off, Nov 14 p 127
Union Sues U. S. Steel Asking \$120 Million Walking-Time Pay, Dec 12 p 122
Union Threatens to Sue for Millions in "Walking Time" Payments, Nov 14 p 134
U. S. Steel and USWA Agree on Basic Policy on Plant Standard Rates, Oct 3 p 86
USWA Asks Secrecy for Records of Membership, Oct 17 p 146
USWA Expected to Keep Specific Wage Demands Under Cover at Present, Dec 19 p 119
USWA Will "Go All Out" for Higher Wages, Says Murray, Dec 5 p 123
Veterans on Payrolls, July, Dec 12 p 109
Wage Increase Request Expected in Langers Cot 21 21

Wage age Increase Request Expected in January, Oct 31 p 97

Steel Industry, Prices:
Advance in Delivered Steel Prices
to Offset Freight Rate Rise,
Oct 10 p 111
Alloy Decontrol Raises Hopes of
Carbon Steel Makers for Price
Rise, Nov 7 p 98
British Increases Range Up to 20
Pct on Cold-drawn Tubes, July
18 p 90
C-1 New Extra Price Card May
Set Pattern for Industry*, Dec
26 p 99
Drums Get New Price Formula,
Nov 7 p 102
Export Products Get New Price
Schedule, Dec 26 p 101
Finished Steel Composite Prices,
1935-1946, Compared With the
1935-39 Average, Nov 14 p 127
Freight Rise Means 14-Pct Jump
for Iron and Steel, Dec 12 p
113
French Steel Prices Increased 36

French Steel Prices Increased 36
Pct, Oct 10 p 117
Geneva Basing Point Price Gives
Little Encouragement for
"Cheaper Steel," Oct 24 p 78
Higher Steel Prices Appear Due;
Some Decontrols Being Requested, Aug 22 p 98
Italian Iron and Steel Prices in
Central and Southern Provinces,
Oct 10 p 117

Kaiser Increases Plates, Shapes and Bars by \$7 Net Ton, Dec 26 p 104 Labor Tension to Ease, Distribu-tion to Improve With Controls Off, Nov 14 p 127 Major Extra Revisions Feature Flat Price Changes, Dec 19 p 112 Portsmouth, Stat C.

Flat Price Changes, Dec 19 p 112
Portsmouth Steel Granted Price Relief by OPA Before Inactivation, July 25 p 104
Price Cut Instead of Wage Rise if Facts Support More Favored by Grace, Nov 7 p 100
Price Increase Restraint Commended, Nov 21 p 82
Producers Increase Steel and Iron Prices, Dec 12 p 111
R FC Again Subsidizes Price of Sheet Bars for Non-Integrated Mills, Aug 22 p 104
Resellers Must Figure Steel Prices at Buyer's Destination, OPA Warns, Sept 19 p 128
Small Producers Announce Scattered Increases, Nov 21 p 103
Strike Clouds Market Picture for Buyers of Scrap, Nov 28 p 117
teel Improvement & Force Co.:

Steel Improvement & Forge Co.: Precision Forging of High Tem-perature Alloys*, Nov 28 p 42

Steel Products Warehouse Assn., Inc.:
Officers Elected by Chicago and Cleveland Chapters, Nov 14 p 172; Detroit Chapter, Nov 14 p 205

Steep Rock Iron Mines, Ltd.: Record Shipment in August, Sept 19 p 151

Stevens Institute of Technology:
Effect of Particle Size on Iron
Powder Properties*, (2 Parts)
Dec 5 p 72; Dec 12 p 76

Stewart-Jackson Instrument Co.: Adjustable Quadrangle Sept 5 p

Stockpiling: Lead and Zinc Stocks, Aug 8 p

OPA Announces New Rules to Aid Stockpiling Plan, Sept 5 p

134 Thomas-May Bill Signed; Joker Clause Defeats Its Major Ob-jectives, Aug 1 p 108

Studer, Fritz, Ltd.: Profile Grinder*, Sept 12 p 77

Strain Analysis by Photogrid Method, by W. F. Brown, Jr., and M. H. Jones⁶, Sept 12 p 50

Strengthening Metal Parts by Shot Peening, by H. F. Moore*, (2 Parts) Nov 28 p 70; Dec 5 p 81

Strikes: Auto Parts Industry Report, Oct

Auto Parts Industry Report, Oct 3 p 83
Bethlehem Unauthorized Strike, July 11 p 96
Brazilian Industrial Expansion Held Back by Major U. S. Strikes*, Dec 19 p 114
BLS Report on Labor-Management Disputes, 1935-39; Average; Jan-Oct 1944, 45, 46, Dec 12 p 92
Canadian Steel Output Cut Further by Strike at Tube Making Plant, Aug 1 p 107
Canadian Steel Strike Continues With Little Hope of Early Compromise, Aug 22 p 99
Canadian Steel Strike Cuts Ingot Output in July to Monthly Low, Oct 10 p 166; August, Nov 14 p 202; September, Nov 21 p 114
Canadian Steel Strike Ends After

p 202; September, Nov 21 p
114
Canadian Steel Strike Ends After
81 Days; 100,000 Tons Ready
to Move, Oct 10 p 118
Canadian Steel Strike May End as
Union Weakens on Pay Issue,
Sept 19 p 103
Canadian Steelmakers Plan Fight
to Finish, Aug 29 p 105
Cleveland Industry Will Be Down
Within Month If Coal Strike
Holds, Dec 5 p 118
Closing of Three Basic Canadian
Steel Producers Hits Fabricator
Plants, Aug 8 p 106
Cloud Market Picture for Buyers
of Iron and Steel Scrap, Nov 28
p 117

Coal Crisis Brings Gloomy Outlook; May Set New Wage Pattern, Nov 28 p 109
Coal Strike Begins to Curtail Steel Operations in Pittsburgh Area, Nov 28 p 111
Coal Strike Expected to End Rated Orders for Steel and Pig Iron, Dec 5 p 127; Dec 12 p 121
Coal Strike May Stop Some Motor Producers This Week, Dec 5 p 92
CIO Makes Final Offer in Com-

5 p 92
CIO Makes Final Offer in Canada's Steel Strike, Asks 15½e Increase, Aug 8 p 106
Cost of Coal Strike Reflected in U. S. Steel Earnings, Aug 8 p 80

Detroit Has 51,000 Idle Because Two Employees Are Fired, Sept 26 p 86 Earnings' Statement of Steel Com-panies Reflect Strike Costs, Aug 8 p 108

panies Reflect Strike Costs, Aug 8 p 108
Ford Labor Trouble, Over Sodium Fluoride, Stalemated, But Issues May Be Settled Without a Stoppage, Nov 14 p 102
Ford Openhearth Stoppage, Over Sodium Fluoride Fumes, Costs 17,000 Tons of Steel, Oct 24 p 70; Nov 7 p 106
German Foundry Strike Ended, Aug 1 p 95
Great Lakes Stoppage May Have Serious Repercussions in Automotive Industry, Aug 22 p 72
Hit Canadian Steel Plants Despite Seizure by Government, July 18 p 105

Seizure by Government, July 18 p 105
Hostlers' Walkout Hurts C-I Rate in Pittsburgh, July 11 p 107
Incentive Pay and Uniform Wage Pattern Involved in New Auto Strikes, July 11 p 70
Inland Steel Container Corp. Workers Agree to End Strike, Aug 8 p 112
Labor Cost is \$1.5 Billion in Wages. Nov 21 p 109
Labor. Management in Deadlock on Demands in Canadian Steel Strike, Aug 15 p 97
Labor Shortage Looms in Pittsburgh; Strike Hit 75,000 Workers. Nov 21 p 135
Lake Shipping Strike Seen About 80 Pet Effective*. Sept 12 p 112
Labor Shortage Looms in Pittsburgh; Strike Hit 75,000 Workers. Nov 21 p 135
Lake Shipping Strike Seen About 80 Pet Effective*. Sept 12 p 112
Labor Shortage Looms in Pittsburgh; Strike, Aug 15 p 96
Losses: Workers, Mandays. Dec 26 p 97
Mediator Appointed to Assist in Settling Granite City Steel Strike, Aug 8 p 109
New York Ore Miners Still Out, July 11 p 98
Nine Industrial Fields in Canada Affected by Labor Union Walkouts, Sept 5 p 99
Pending at Ford and Chrysler, Aug 29 p 64
Pittsburgh Steel Rate Holds Up Despite Power Strike; Finishing Hurt, Oct 3 p 87
Pittsburgh's Worst Power Strike Ended, Oct 24 p 100
Pullman - Standard Wins Breach of Contract Suit Against Union, Dec 5 p 115
Reduce Canada's Ingot Operating Rate, July 25 p 96
San Francisco Bay's Major Worry Was Rail Embargo and Brief General Strike, Dec 12 p 94
Sealed Power Co. Strike Settled, Nov 7 p 74
Wes' Coast Steel Producers Placed in More Vulnerable Spot During Coal Strike by Scrap Shortage, Nov 28 p 92
Whys of John L's Strike and of Calling It Off Flow Freely in Washington, Dec 19 p 90
(See also Labor)

Studebaker Corp.: Introduces Its 1947 Commander*, Oct 24 p 70

Sturgis Products Co.:
Britehoning, a New Metal Finishing Process, for Small Parts,
Aug 29 p 50

Submarine Signal Co.: Variable Speed Drive, Oct 31 p 59

Sullivan, George F.: Experts Seek Common Ground on Productivity Puzzle, Nov 7 p

Exporters See No Improvement in New Accelerated Licensing Plan, Oct 3 p 88 New Factors Complicate Scrap Supply Problem, Aug 15 p 95 Steel Union Threatens to Sue for Millions in "Walking Time" Payments, Nov 14 p 134

Summers, John, & Sons, Ltd.: New 80-In. Cold Reduction Mill to Be Installed*, Nov 28 p 113

Sundstrand Machine Tool Co.: Duplex Milling Machine*, Nov 28 p 78

Super Tool Co.: Carbide Tool Bit, Dec 26 p 72

Superdraulic Corp.: Midget - Size Hydraulic Motor*, Oct 31 p 59

Superior Sheet Steel Co.: Borg-Warner Corp. Buys Physical Assets, Nov 14 p 125

Supersonics:
Inspection of Steel, Aug 22 p 58
Navy Plans World's Largest Centrifuge for Supersonic Study,
Oct 3 p 120
Sperry Reflectoscope Checks Plate
Quality for Welding*, Sept 12

Surface Finishes for Aluminum, by J. F. Mason*, (3 Parts) Aug 29 p 40; Sept 5 p 50; Sept 12 p 66

p 00

Surpluses, Government:
Acquisition and Disposal, by Agency, Nov 28 p 90
Aircraft Sale Attracts 104 Bidders, Aug 22 p 150
Aircraft, U. S. Surplus, Infuse New Strength to Foreign Airlines, Nov 14 p 140
Alcoa Gets WAA Nod on Cressona Plant Sale, Aug 22 p 111
AAF's 700,000 Items Indicate Magnitude of Disposal Task, Aug 1 p 112
Approved Dealers Appointed, July

AAF's 700,000 Items Indicate
Magnitude of Disposal Task,
Aug 1 p 112
Approved Dealers Appointed, July
11 p 131; July 18 p 138
Auto Parts Sold, Nov 14 p 207
Automotive Parts Disposal Hits
Record in Cleveland in August,
Oct 10 p 111
Batteries Offered by WAA, Nov
28 p 121
Bell Aircraft to Buy Large Niagara Plant, Nov 7 p 113
Bids for Republic's S. Chicago
Steel Plant Being Considered by
WAA, Oct 17 p 143; Nov 21 p
84; Nov 28 p 107; Dec 12 p
109; Dec 26 p 115
Big Inch Line Bids Active, July
25 p 94
Blaw-Knox Buys Plant Near
Pittsburgh, Oct 31 p 98
California Scrap Iron Corp. Buys
Surplus Scrap Plant, Dec 5 p
134
Canada's Disposal Hits \$26,100,-

Canada's Disposal Hits \$26,100,-000 in June, Sept 5 p 138 Champion Machine & Forging Co. Is Declared Surplus, Aug 1 p

Is Declared Surplus, Aug 1 p
82
Cleveland Area to Get Sale of \$1
Million Worth of Surplus Items,
Oct 3 p 134
Coking Coal Mines for Sale, Oct
17 p 146
Committee Set Up for Disposal of
Metalworking Machinery and
Equipment, Sept 5 p 142
Credit for Foreign Buyers Asked,
July 18 p 111C
Direct Sales of Aeronautical Tooling Permitted, Aug 8 p 82
Disposals of Steel Plants and Facilities, Sept 19 p 107
Douglas Aircraft Buys Plant, Nov
21 p 152
Eight Major Plants for Disposal
by WAA, July 4 p 154
European Theatre's Disposal of
U. S. War Items*, Nov 21 p
117
Finland's Energetic Procurement

Finland's Energetic Procurement of U. S. Surplus Goods Spurs Recovery, Nov 28 p 137
Foreign Sales to Be Promoted, Oct 17 p 78
France Establishes Corporation to Handle Equipment Received as Reparations, Oct 10 p 118
Heat-Treating Items Offered by WAA, Oct 17 p 82
Indiana Group Gets Bid for Surplus Aircraft, Sept 5 p 74

Inland Steel Awarded East Chi-cago War Plant, Oct 31 p 96 J&L Buys Benson Iron Ore Plant, Aug 22 p 111

Buys Tacoma Aluminum Plant, Dec 5 p 132; Dec

12 p 96
Kelsey-Hayes Buys Aluminum Ingot and Forging Plant, Oct 17 p 109
Lead, Tin-Base Solder to Be Sold by WAA, Oct 10 p 170
Lease and Sale of War Plants Announced, Sept 5 p 157; Sept 19 n 108

Announced, Sept 5 p 157; Sept 19 p 108
List of War Properties Announced,
Dec 19 p 88
Machine Tool Distributors Condemn Recent WAA Actions;
Ask for Reforms, Sept 26 p 111,
124

Ask for Reforms, Sept 26 p 111, 124
Machine Tool Price Question Causes Division Within WAA, Sept 19 p 110
Machine Tool Sales, May-June, July 18 p 138
Machine Tool Sales Below Clayton Formula Prices Rumored, Sept 12 p 120
Machine Tool Sales Cut August Shipments, Oct 10 p 124
Machine Tool Sales Volume, Cleveland Region, January-November, Dec 26 p 114
Machine Tool Surplus Sales Booming at Cut Prices, Nov 14 p 144
Machine Tools and Industrial

Machine Tools and Industrial Equipment Offered for Sale at New York, July 4 p 120
Machine Tools Disposal Faults Highlighted by O'Mahoney, Oct 3 p 104, 117
Machine Tools, Inventory 1st and 2nd Quarter 1946, Aug 15 p 112
Machine Tools Trade Brisk in Southern California, Dec 26 p 82
Machine Tools, 2800 cm Schol

Machine Tools, 2800, on Sale in Chicago, Dec 7 p 94
Machine Tools Worth \$350 Million to Be Sold on Cut Price Basis, Oct 17 p 113
Magnesium Plant for Sale or Lease, July 18 p 88; Oct 24 p 114

Nails for Food Boxes, July 11 p

Change in Prices, July 11 p

98
No WAA Edge for Brokers, Aug
15 p 108
Overseas Spot Sale Moves Difficult Items, Nov 21 p 162
Overseas Surplus 85 Pct Sold,
According to State Dept, Report, Nov 21 p 116
Plants and Pipeline Listed for WAA Sale, Aug 29 p 99
Priority Claimants May Have Shorter Time to Buy at Site Sales, Oct 24 p 100
Property Now on Sale Worth
Billion Dollars, Reports WAA,
Dec 26 p 114

Billion Dollars, Reports WAA, Dec 26 p 114
Schools to Get Tools and Equipment, Oct 17 p 128
Scrap Advisory Group Asks Surplus Scrap Be Sold at Sealed Bids, July 4 p 163
Scrap for Sale, July 18 p 105
Ship Items Sold, Sept 5 p 107
Slack in Disposal of New England War Plants, Aug 15 p 147
Small Business Aided in Acquisition of Real Property, July 11 p 80
Steel Pipe Offered for Sale, July Steel Pipe Offered for Sal

Small Business Aided in Acquisition of Real Property, July 11 p 80
Steel Pipe Offered for Sale, July 11 p 135
Tank Arsenal Leased by Buick for Warehouse, Oct 17 p 78
30 WAA Housing Items Channeled Into Veterans' Projects, July 25 p 138
26 Pet of Surplus Plants Sold in Cleveland Region in August, Oct 3 p 101
Veterans Administration to Receive Hand Tools From WAA, Dec 26 p 102
Walsh Construction Co., to Handle Government Disposal, Aug 8 p 80
WAA and FLC Maying Slowly

Handle Government Disposal, Aug 8 p 80 WAA and FLC Moving Slowly Toward Improved Disposal Pro-gram; Get Only 28 Pct Return, Nov 28 p 88 WAA Issues Listing of Sales and Sites, Sept 19 p 108 WAA Lists Machines to Be Sold as Scrap, Aug 29 p 98 WAA "One-Stop" Service Aids Surplus Buyers, Nov 21 p 121

WAA Outlines Disposal Policies, July 25 p 149
WAA Plans to Sell 75 Pct by Jan. 31, Oct 31 p 96
WAA Plant Sale to C-I Ap*proved by Dept. of Justice, Aug 1 p 114
WAA Reports Sales of Plants.

WAA Plant Sale to Universely Bridge Brings Out Hungry Buyers; Construction Brigges Increase Structural and

WAA Steel Offering Brings Out
Hungry Buyers; Construction
Projects Increase Structural and
Bar Demands, July 4 p 90
WAA to Dispose of Small Surplus Lots, Sept 26 p 158
WAA to Hold Valve Sale, Aug 8
p 115
WAA to Speed Disposal of Surplus Electronics, Aug 22 p 108
WAA to Use Fixed Price
Register For Surpluses, Dec
5 p 98

Var Plant Sales at Snail's Pace in New England Area, July Zimmerman Casting Plant Sold, mmerman Casting Plant Sold, Aug 8 p 151

weden:
Government Plans Expansion of
Steel Mill Built in Far North
During 1940, Dec 12 p. 98
High Frequency Furnace for Cast
Iron*, Dec 5 p. 86
Scotal Democratic Government
Moving Slowly in Industry, Dec
Sponge Iron Powder Now April

Sponge Iron Powder Now Available at Lower Prices*, Sept 26 p 114 Steel Companies Planning Ex-

p 114 teel Companies Planning Ex-pansions*, Dec 26 p 106

Switches:

Facing Material, Callite Tungsten Corp.*, Aug 1 p 69 Master Switch, Electric Con-troller & Mfg. Co.*, Aug 1 p

Nine-Position Switch, General Control Co.*, Aug 1 p 69
Power-Feeder Switch, Moseback Electric & Supply Co.*, Aug 1 p 69
Precision Snap Switch, Square D Co.*, Aug 1 p 69
Pressure Switches, Cook Electric Co., Oct 31 p 62
Switchbreaker, Code Electric Products Corp., Aug 1 p 69

Switzerland: witzerland: U.S. Cars Received First Half of 1946, Nov 7 p 95

Sylvania Electric Products, Inc.:
Crystal Converters*, Dec 19 p 84
Recording Dilatometer*, Dec 19 p 81
Vibration Resistent Lamps, Ang 22 p 69

Symington, Stuart:
Pleads for Unification of Services
With Equality for Air, July 4
p. 116

T

Tagliabue, C. H., Div.: (See Portable Products Corp.)

Dynamometer-Truck to Test Drawbar Pull of Army Tanks*, Oct 24 p 80

Tanks, Storage: (See Containers)

Tantalite:
Australian Tantalite Develor for Radar Still Vital to dustry, Aug 22 p 134

How to Developed

Tantung—What It Is, How to Use It", Nov 14 p 76

Tapping: Control Unit, Pond Engineering Co.*, Nov 28 p 80

Drilling and Tapping Unit, W. K. Millholland Machinery Co.*, Sept 12 p 78
Electrolized Taps, Electrolized Tap Corp.*, Aug 29 p 61
Quadruple Acme Threads*, July 25 p 57

Tap Extractors, Aug 29 p 62

Tap Extractors, Aug 29 p 61

Tap Sharpener, Edward Blake
Co.*, Nov 28 p 80

Turret Tapper, Universal Engineering Co.*, Nov 7 p 67

Tata Iron & Steel Co.: Reports Steel Ingot Output of 1,135,000 Tons, Nov 28 p 118

Taxation:
Excess Profits Tax Council To
Operate Soon, July 4 p 88
GOP Pledge to Slash Taxes
Excites Hope It Can Be
Fulfilled, Dec 12 p 90

Taylor, H. F., Bishop, H. F., and Wayne, R. C.: Copper Alloy Cast Steels, July 11 p 57

Techtmann Industries: Drill Driver*, July 25 p 64

Temper Embrittlement of Aircraft Steels, by P. A. Haythorne*, Aug 29 p 51

Temperature Measurement of Liquid Steel, by D. Manterfield*, July 25 p 52

Templeton, Kenly & Co.: Track Shifter, Aug 8 p 76

Tennant, G. H., Co.: Floor Machine*, Oct 10 p 79

Tennessee Coal, Iron & Railroad Co.: New Construction Program, Sept 12 p 118

Test Bar Data v. Casting Properties, by C. R. Austin, Sept 26 p 70

Thrun, W. E., and Heidbrink, C. R.: R.: Semiquantitative Tests for Moly in Steel, Oct 3 p 41 Spot Testing for Aluminum, Nov 28 p 68

Timby, T. C.: Observations on Alkaline Elec-trotinning, July 25 p 58

Testing and Inspection:
Cable Tester and Locator, W. C.
Dillon & Co., Inc.*, Aug 22 p

Carbon Determinator, Lindberg Engineering Co.*, July 18 p 75 Case for 100 Pct X Ray In-spection of Aircraft Castings*, Oct 10 p 56 Circnit Tester, Precision Ap-paratus Co., Inc.*, Oct 17 p 72

Coil Tester, General Electric Co., Aug 15 p 65
Coil Testers, General Electric Co., Dec 19 p 83
Contour Comparator, Sheffield Corp.*, July 18 p 76
Data Now Available on Minerals Detectors, Aug 8 p 138
Dewpoint Indicator, Illinois Testing Laboratories, Inc.*, Oct 17
p 73
December 1 Recorder, General Elec-

p 73
Dewpoint Recorder, General Electric Co., Oct 17 p 73
Drum Type Calculator for Spectrographic Analysis, Harry W. Dietert Co.', Oct 17 p 74
Ductility Testing Machines, Steel City Testing Laboratory*, Aug 15 p 65
Dynamometer-Truck to Test Demo

Dynamometer-Truck to Test Draw-bar Pull of Army Tanks*, Oct 24 p. 80

Dynamometers for Measuring Torque, L. A. B. Corp.*, Aug 15 p 65 Effect of Particle Size on Iron

15 p 65
Effect of Particle Size on Iron
Powder Properties*, (2 Parts)
Dec 5 p 72; Dec 12 p 76
Electron Diffraction Examination
of Electro-Cleaned Steel, Oct
10 p 70
Electronic Analyzer, Weston Electrical Instrument Corp.*, Aug
15 p 67
Elongation Testers, General Electric Co.*, July 18 p 75

Engine-Mount Tester, Link Engi-neering Co.*, Aug 15 p 65 Frequency Meter, Communication Measurements Laboratory*, Aug

15 p 66 Hardenability Test for Quenched and Tempered Steel*, Sept 5 p

Hardness Gages, R. A. Webster*,
Dec 19 p 84
High Frequency Probe, Alfred
W. Barber Laboratories, July
25 p 66
High Speed Spectrography*, (2
Parts) Aug 8 p 50; Aug 15 p
60

for the following forms from the following forms from the following from the following from the following forms for the following forms from the forms from the following from the f

28 p 81

Low-Range Tester for Lighter Raw Materials and Small Finished Items, W. C. Dillon & Co., Inc.*, Dec 19 p 82

Measuring Heating Rate of Steel Slabs, Oct 10 p 74

Megohm Meter, Communication Measurements Läboratory*, Aug 15 p 68

Megohm Meter, Communication Measurements Läboratory", Aug 15 p 68
Metal Identifier, Control Equipment Co.*, July 18 p 75
Metals Identification; Quick Methods, Oct 17 p 58
Molybdenum in Steel; Semiquantitative Tests, Oct 3 p 41
Multirange Tester, Precision Apparatus, Inc.*, Oct 17 p 73
Navy Plans World's Largest Centrifuge for Supersonic Study, Oct 3 p 120
Navy Precision Gage Lab at Ohio State, Aug 1 p 113
Oscillator Permits Stepless Adjustment*, Nov 28 p 66
Overspeed Tachometer, Metron Instrument Co.*, July 18 p 75
Oxygen Impurities Indicator, Baker Co., Inc.*, July 18 p 75
P-V Test, Hardenability Measure*, Nov 14 p 66
Phase Microscope, American Optical Co., Dec 19 p 83
Pipe Locator, Nilsson Electrical Laboratory, Inc.*, Aug 16 p
68

Plastic Adhesive Outlasts Metal in Fatigue Tests, Nov 14 p 91 Pneumatic Fatigue Testing Development Described at ASTM Meeting, Aug 15 p 134 Polarographic Analysis of Zinc in Aluminum Alloys*, Oct 3 p 36 Pressure Lower Countries of Pressure Countries of Press

Pressure Losses in Pipe Fittings Studied*, Oct 24 p 50 Properties of Various Alloys at Sub-Zero Temperatures, Nov 14

Sub-Zero Temperatures, Nov 14 p 75 Radioactive Tracer, Autoscaler, Tracerlab, Inc.*, Dec 19 p 82 Radiographic Inspection Standards in German Wartime Industry, Sept 19 p 47 Recording Dilatometer, Sylvania Electric Products, Inc.*, Dec 19 p 81

Reflectoscope Checks Plate Quality for Welding*, Sept 12 p 64
Resistance Meter. Associated Research, Inc.*, Oct 17 p 73
Resistance Tester, Ideal Industries, Inc., Oct 17 p 72
Sampling Techniques Applied to Quality Control, Dec 12 p 70
Sheet Thickness Measured by Deflection*, July 18 p 67
Spot Testing for Aluminum in Iron and Steel Scrap, Nov 28
p 68
Strain Analysis by Photogrid

p 68
Strain Analysis by Photogrid
Method*, Sept 12 p 50
Strain-Gage Amplifier, General
Electric Co.*, Aug 15 p 66
Supersonic Inspection of Steel,
Aug 22 p 58

Aug 22 p 58
Surface Analyzer, Brush Development Co.*, Dec 19 p 81
Surface Finish Measuring Instrument, Topograph, David Brown & Sons (Huddersfield)
Ltd.*, Dec 19 p 81
Surface Finish Standards, University Machine Co., Dec 19 p 81

81 Surface Pyrometer for Steel Slabs Developed by U.S. Steel*, Oct 24 p 64 Surface Scratches on Alclad Sheet, Oct 3 p 40

Temperature Measurement of Liquid Steel*, July 25 p 52

i-

ug

ed p ...

nt,

ter in-

cel

ion

ip-

ick

nti-

Ap-

est dy,

at

Ad-

ron 76 tor, 75 re",

Op-

ical p

etal

e in

ings

at 14

aler, 82 ards stry,

ality

Redusd to 70 De-

n in v 28

ogrid neral Steel,

velop-

In-David sfield)

Slabs Oct

Sheet,

Test Bar Data v. Casting Properties, Sept 26 p 70
Thread and Gear Measuring Wires, Lincoln Park Industries*, Sept 5 p 69
Torque Values for Standard AN Bolts and Nuts, Oct 10 p 59
Torsion Testing Machine, Sonntag Scientific Corp.*, Dec 19 p 82
Training Spark Testers, July 18 p
65
Tube Testing Pages B

Tube Testing Press, Beatty Ma-chine & Mig. Co., Aug 15 p 20-Million Volt Betatron for In-dustrial Radiography*, Nov 21

dustrial Radiography*, Nov 21 p 60
Two-Element Balancing Machine Incorporates Automatic Drill*, July 25 p 62
Universal Testing Unit, Wilson Mechanical Instrument Co., Inc.*, Dec 19 p 82
Wartime Developments Scanned by ASTM Engineers at Annual Meeting*, July 4 p 72
Welded Truss Stresses Tested with Strain Gages*, July 25 p 45

45 X Ray Diffraction as an Analytical Tool*, Sept 19 p 55 X Ray Photometer, General Elec-tric Co., Oct 17 p 74

Texas Co.: Cutting Oils, Nov 28 p 82

Texas Smelting & Refining Co.: Antimony Price Increase Announced, Nov 14 p 146; Dec 26 p 118

Thermo Electric Mfg. Co.: Electric Furnace*. Nov 21 p 75

homas Steel Co.: Earnings, Third Quarter, Oct 31 p 98

Thomson Electric Welder Co.: Bench Type Spot Welder*, Oct 24 p 65

Thread Rolling—Theory and Prac-tice, by J. W. Batchelder*, (Parts 1, 2) Dec 19 p 58; Dec 26 p 55

Threading:

hreading:
Automatic Nipple Machine, Landis
Machine Co.*, Nov 28 p 81
Centering Throat Chaser, Landis
Machine Co.*, Dec 26 p 69
Thread Faster, Peerless Tool &
Engineering Co.*, Nov 7 p 67
Thread Rolling—Theory and Practice*, (Parts 1, 2) Dec 19 p 58;
Dec 26 p 55

Time Studies:
Cost Reducing Program for a Job
Shop*, Sept 26 p 56
Industry Expands Use of Time
Study, Aug 1 p 53
Training Time Study Men*, Aug
1 p 50
(See also Management)

Tin: Allocations, Mar and June, Aug 1

Allocations, Mar and June, Aug 1 p 84
Allocations, by Country, Second Half of 1946, Oct 17 p 130; Final Allocation, Dec 5 p 132
Bolivian Tin for U.S. May Reach 19,000 Tons, Oct 10 p 126
Bolivian Tin Prices Set, Aug 22 p 116
British Expert Estimates 1946
World Output at 103,200 Tons, Aug 22 p 101
British Stocks Decline in September, Nov 14 p 203
Conference Recommends Establishment of International Study Group, Oct 31 p 76
Control Seen After Expiration of CPA, Sept 26 p 126
Controls Retention Asked of CPA by Can Manufacturers' Committee, Nov 21 p 124
Croston Sees Prewar Production Rate in 1949, Aug 1 p 118
Dealers Stick to Established Ceilings, July 25 p 112
Dutch East Indian Tin on Increase, Sept 5 p 116
Government Purchases to Continue, Nov 28 p 126
Imports Climb in October, Dec 26 p 115
Output Remains Below Prewar Level, July 11 p 112

Pig Tin Quotas for Milk Con-tainers Raised by CPA, July

Pig Tin Quotas for Milk Containers Raised by CPA, July 25 p 150
Price Increase Not Expected Soon, July 4 p 124; Dec 26 p 118
Price Range of \$474 a Ton Upsets World's Scrambled Tin Market, Aug 8 p 139
Prices to Be Increased by Metals Reserve, Nov 14 p 146
Raise Export Markups, Oct 24 p 114
Restrictions Removed on Use in Babbitt, Oct 31 p 110
Shortage Predicted in 1947, Oct 17 p 130
Third Quarter Pig Quotas Advanced 10 Pet Over Second, July 11 p 104
"Where Is the Tin?" Answered from Great Britain, Aug 1 p 84
World Production Estimates, 1946

World Production Estimates, 1946, 1947, Oct 31 p 76

Tin Producers' Assn.: Price Range of \$474 a Ton Up-sets World's Tin Market, Aug 8 p 139

Tinnerman Products, Inc.: Speed Nuts*, Oct 10 p 79

Tinplate:

CPA Frees 15 Pct of Tinmill
Production, Sept 12 p 111
CPA May Relax Some Restrictions
on Production, July 4 p 114
CPA Order Revised, Dec 26 p
115

CPA Order Revised, Dec 26 p

115
Easing of Canning Requirements,
Sept 12 p 105
Electrolytic Timplate Growth Retarded by War Restrictions,
Sept 5 p 97
Exports of 55,000 Tons to
Southern Countries Approved by
CPA, Oct 10 p 112
Foreign Allotments Reflect Eased
U.S. Needs, Sept 5 p 97
Limitations Expected to Be Eased
or Revoked on Sept 30, Aug
15 p 111
Observations on Alkaline Electrotinning, July 25 p 58
Serap Decontrolled, Dec 5 p 129
Tin and Timplate Shipments, Hot
Dipped v. Electrolytic, 1945,
Jan-June 1946, Sept 5 p 98
Fooling for Tapers, by J. J.

Tooling for Tapers, by J. J. Meadows*, July 18 p 68

Meadows*, July 18 p 68

Tools, Cutting:
Abrasive Wheels, Wickman Corp.,
Sept 5 p 68
Adjustable Circle Cutter, Bruno
Tools*, Sept 5 p 67
Automatic Metal Saw, Peerless
Machine Co.*, Nov 28 p 81
Carbide Cutters, Wendt-Sonis
Co.*, Dec 26 p 71
Cut-Off Saw Attachment, Machine Specialities, July 25 p 64
Cutter and Tool Grinder, Cincinnati Milling Machine Co.*, Sept
12 p 77

cnme Specianties, July 25 p 64
Cutter and Tool Grinder, Cincinnati Milling Machine Co.*, Sept
12 p 77
Cutter and Tool Grinder, Covel
Mig. Co.*, Nov 28 p 79
Development Must Keep Pace
With Atomic Progress, Says
Brown, Nov 7 p 82
Diamond Abrasive, Bay State
Abrasive Products Co.*, July
25 p 64
Disk File, Kennametal, Inc., Dec
26 p 72
Face Mill, Kennametal, Inc.*,
July 25 p 63
Flame Cutting and Welding in
Bulldozer Manufacture*, Sept
12 p 56
Floating Reamers, David Brown
& Sons (Huddersfield) Ltd.,
Nov 7 p 68
Fly Cutters, New-Field Machined
Parts Co.*, Aug 29 p 62
Grooving Tool Blades, Kennametal,
Inc.*, Dec 26 p 71
Guide Simplifies Gas Cutting of
Pipe*, Aug 22 p 58
High-Speed Metal Saw, DoAll
Co.*, Sept 12 p 80
Hole Cutters, Wyzenbeek & Staff,
Inc.*, Dec 26 p 70
Knurling Rolls Improvised from
Carboloy Outlast Steel, Nov 28
p 66
Knurling Tool, Barnaby Mfg. &
Tool Co.* Nov 7 p 60

Carboloy Outlast Steel, Nov 28 p 66
Knurling Tool, Barnaby Mfg. & Tool Co.*, Nov 7 p 69
Lathe File, Henry Disston & Sons, Inc., Nov 7 p 69
Lathe File, Kennametal, Inc.*, Aug 29 p 62

Metal Sawing Machine, Motch & Merryweather Machinery Co.*, July 11 p 68
Metal Slitting Machine, Torrington Mig. Co., July 11 p 68
Oxygraph Available for Shape Cutting Stainless Steel by Flux-Injection Method*, July 4 p 42
Power Hacksaw Ills—Their Causes and Cures*, Oct 24 p 56
Sawing Metal by Electrolytic Action, Dec 26 p 61
Short Drills, Chicago-Latrobe Twist Drill Works, Nov 7 p 67

67
Thread Faster, Peerless Tool & Engineering Co.*, Nov 7 p 67
Turning Tool Holders, CooperBessemer Corp.*, Aug 29 p

Turret Tapper, Universal Engineering Co.*. Nov 7 p 67 (See also Carbide Tools)

Tools, Hand:
Flexible Shaft Utility Tool,
Dumore Co.*, Nov 7 p 69
Hammer with Plastic Doublehead,
Schmidgall Mfg. Co., Nov 7 p
70

Pneumatic Drill, Aro Equipment Corp.*, Nov 7 p 68 Shielded Clamp, Mechanics Engi-neering Co., Oct 24 p 68 Toggle Pliers, Knu-Vise, Inc.*, July 25 p 66 Veterans Administration to Re-ceive Surplus From WAA, Dec 26 p 102

Tools, Machine: (See Machine Tools)

Topflight Tool Co.: Spin Dimpler*, Sept 12 p 79

Torrington Mfg. Co.: Metal Slitting Machine, July 11 p

Tour, Sam. & Co.: German Bimetal Tubing, Nov 28 p 76

owmotor Corp.: Side-Mounted Motor Truck, Aug 8 p 73 Unloader*, Aug 8 p 73

Tracerlab, Inc.: Radioactive Tracer, Autoscaler*, Dec 19 p 82

Trade-Morks: Act Protects Users, Aug 22 p 138

Training Spark Testers, by E. W. Lundahl*, July 18 p 65

Training Time Study Men, by T. R. Turnbull*, Aug 1 p 50

Transicoil Corp.: Low Inertia Motor*, Aug 1 p

Transportation:
Armco River Boat Crews Reject
C1O-NMU, Oct 17 p 152
Chicago Greets First Dutch Ship
Since 1940, July 25 p 126
Chicago Rate Falls to 75½ Pct in
Coal Crisis; Freight Embargo
Will Cause Paralysis, Nov 28 p

111
Freight Cars Produced, New Orders Received, September and October, Dec 5 p 115
Freight Rise Means 14-Pct Jump for Iron and Steel, Dec 12 p

Great Lakes Freight Decontrolled by OPA, Aug I p 114 Lake Erie-Pittsburgh Canal Idea Revived, Oct 17 p 160 Lake Shipping Strike Seen About 80 Pct Effective*, Sept 12 p 112

Lake Strike Threatens to Cut Steel
Operations This Winter, Aug
15 p 96
Low Motor Truck Rate From Geneva Stirs Little Interest, Nov
28 p 92
Mahoning Valley Urges Lake-toRiver Canal, Nov 7 p 151
Military Transport of the Future,
Nov 21 p 112
(See also Railroads)

Treasury Dept.: RFC War Plants Returning 16,300 Tons of Silver, Oct 24 p 125

Trethaway Associates: Molding Alloy, Sept 26 p 81

Triple Alloy Structural Tubing, by C. M. Schwitter*, Aug 22 p 46

Triplex Machine Tool Corp.: Swedish Centerless Grinders*, July 4 p 78

Trucks:
Dynamometer-Truck to Test Drawbar Pull of Army Tanks*, Oct 24 p 80
Industrial Power Trucks Cut Material Handling Costs*, July 4 p 62
Production, 1946 (Estimate), Dec. 19 p. 88

Production, 1998 19 p 88 Registrations for June and July, Sept 12 p 144; August, Oct 17 p 78; September, Dec 5 p 94; October, Dec 26 p 136

Trumpis, R. A.:
Production Control for Small
Plants*, July 25 p 49

Tubes, Pipe:

Bending Machine, Leonard Precision Products Co.*, Oct 3 p 57

Bundy's Cost Saving Plan Adds to Employee Base Pay*, Oct 31 p 64, 92

Coupling, Parker Appliance Co.*, Dec 12 p 83

Extruded Magnesium Tubing Specifications, Oct 31 p 55

German Bimetal Tubing, Nov 28 p 76

German Bimetal Tubing, Nov 28 p 76
Hot Stretch-Reducing of Seamless Pipe at National Tube Plant, Dec 5 p 155
Pressure Gas Welding of Alloy Steel Tubing, Nov 28 p 61
Stretch-Reducing Seamless Tubing, Dec 12 p 62
Tailor Made Boiler Tubing*, Aug 15 p 48
Triple Alloy Structural Tubing*, Aug 22 p 46
Tube Expanders, Richard Dudgeon, Inc., Oct 10 p 78
Tube Investments Shuts Down Subsidiary Because of Steel Shortage, Oct 31 p 96

Tucker Corp.: Leases Dodge-Chicago Plant to Produce New Auto, Sept 26 p 112

Plans Output of Its New Car in 8 to 10 Months, July 25 p 106 Rents Plant to Build Motor Cars, July 11 p 102

Tungsten:
GE Contracts for One Third of
Its Tungsten, Sept 26 p 120
Heavy Alloy, Powder Metallurgy
Product, Aids Machine Design*,
Sept 19 p 62

Tungsten Mining Corp.: GE to Purchase Output, Sept 26 p 120

Turbines:
Aircraft Gas Turbine Project Announced by DeLaval, Aug 15 p
128
Blade Steels, German High Temperature, July 11 p 52
Coal Burning Unit for Locomotives Will Be Tested in West,
Nov 28 p 150
Development of New 2000-hp Gas
Turbine Is Disclosed*, Dec 12
p 137
GE Engloyy to Cost \$20 Million

Turbine Is Disclosed*, Dec 12 p 137
GE Factory to Cost \$20 Million, Oct 24 p 111
High Temperature Alloys for Gas Turbines, July 4 p 73
Locomotive Gas Turbines of 3750-hp Ordered by Coal Group*, Sept 19 p 102
Metallurgical Development of Materials for Turbosuperchargers and Gas Turbines*, (2 Parts) July 25 p 40; Aug 1 p 60
Precision Forging of High Temperature Alloys for Gas Turbines*, Nov 28 p 42
Steam Turbine Studies Set Up by Allis-Chalmers, Aug 22 p 143
Welding Jet Engine Parts*, Sept 5 p 46
(See also Engines)

Turco Products, Inc.: Hot Tank Cleaner, Dec 5 p 88 Steam Cleaning Unit, Oct 10 p 78

Turnbull, T. R.: Training Time Study Men*, Aug 1 p 50

Tweco Products Co.:

Electrode Holders for Manual

Welding, Oct 24 p 68

Tong Type Electrode Holder*, Tong Type Oct 24 p 68

Udy, M. C., and Rosenthal, P. C.: Boron in Some Alloy Steels, Nov 28 p 64

Union Metal Mfg. Co.: Trailer Undercarriage*, Aug 8 p

Union Steel Co.: New Plant for Fabrication of Structural Steel and Plates, Sept 12 p 92

United Electric Controls Co.: Temperature Control*, July 18 p

United Engineering & Foundry Co.: 250-Ton Mechanical Sheet Perforating Press*, Oct 3 p 55

IINRRA: Chinese Farm Implement Goal Set at \$21 Million, Oct 31 p 104

104 CPA Watches Machinery Sched-ules, Sept 5 p 145 Italian Steel from UNRRA Coal*, Dec 26 p 103 Reduction in Tractors, Oct 17 p

WAA Rules on Foreign Sales Seen as Result of Public Reaction, Sept 26 p 148

United Precision Products Co.: Gage Sets, Sept 5 p 69

United Refrigerator Co.: Converting Surplus Presses by Arcwelding*, Sept 26 p 65

United States:

Exports of Domestic Industrial
Products Cumulative Through
June 1945-46, Sept 12 p 158
Revamped Congressional Machine
Simplifies Legislative Process;
Affords Opportunity for Economies, Aug 22 p 76
Symingston Pleads for Unification
of Services With Equality for
Air, July 4 p 116

United States Employment Service: Labor Supply Up, Jobs Go Begging, Aug 29 p 124 Predicts No Change in Present Employment Trends, Oct 31 p

Reports 16 Pct Gain in Employ-ment for Three-State Region, Nov 7 p 107

U. S. Rubber Co.: Detroit Products Plant Moves to Fort Wayne, Sept 5 p 140

U. S. Steel Corp.:

Application for Lower Freight
Rates from Geneva Develops
Ramifications, July 18 p 86
Basic Policy on Plant Standard
Wage Scales Agreed Upon with
USWA, Oct 3 p 86
Deal Sealed With WAA for Government Steel Properties*, Aug
15 p 109
Earnings 2 pd Overtee St.

ernment Steel Properties*, Aug 15 p 109 arnings, 2nd Quarter, Show High Cost of Coal Strike, Aug 8 p 80; Third Quarter, Oct 31 p 87

p 87
Earnings, Shipments, Production,
Employees, Payroll, Third Quarter, Nov 7 p 100
Johnston Retires as Director of
Research Lab., Nov 7 p 114
Measuring Heating Rate of Steel
Slabs, Oct 10 p 74
New Eastern Mill, Oct 24 p 93
Operations Face Virtual Shutdown, Says Olds, Dec 5 p 120
Plans for Wider Use of Steel in
Home Construction, Sept 26 p
164

Publishes New Stainless Extras, Aug 8 p 114 Radiation Type Surface Pyrometer Developed*, Oct 24 p 64 Subsidiaries Negotiate License for Output of Hi-Bond Bar, Aug 22 p 113 Sued by Union Asking \$120 Mil-lion Walking-Time Pay, Dec 12 p 122

U. S. Steel Export Co.: New Price Schedule in Effect on Export Products, Dec 26 p 101

United Steelworkers of America:
Asks Secrecy for Records of Membership, Oct 17 p 146
Basic Policy on Plant Standard
Wage Scales Agreed Upon with
U. S. Steel, Oct 3 p 86
Specific Wage Demands Expected
to Be Kept Under Cover at
Present, Dec 19 p 119
Sues U. S. Steel for \$120 Million
Walking-Time Pay, Dec 12 p
122
Threatens Suit for Millions in

122
Threatens Suit for Millions in "Walking Time" Payments, Nov 14 p 134
Wage Increase Demands Indicated for Next February, Oct 31 p 72
Wage Increase Request Expected in January, Oct 31 p 97
Will "Go All Out" for Higher Wages, Says Murray, Dec 5 p 123

Universal Engineering Co.: Turrent Tapper*, Nov 7 p 67

Universal Engraving & Colorplate Co., Inc.: Protractor*, July 25 p 66

University Machine Co.: Surface Finish Standards, Dec 19 Surface p 81

Upsetting Tubular Members Simplified by Special Grippers, by L. R. Pistoles*, Aug 15 p 42

٧

Vacuum Melting in Germany, by G. T. Motock*, Dec 12 p 64

Valley Tool & Precision Corp.: Shepherd Surveying Stage, Used in P-V Hardness Test*, Nov 14 p 67

Valves:
Air, Mead Specialties Co.*, Aug
22 p 68
Check, Grove Regulator Co.*,
Aug 22 p 67
Four-Way Valve, Numatics*, Aug
1 p 68
Grinding Machine, Milwaukee
Cock Grinding Machine Co.,
Nov 28 p 80

Grinding Machine, Milwaukee
Cock Grinding Machine Co.,
Nov 28 p 80
Liquid Meter, Morganite Brush
Co.*, Aug 22 p 68
Pilot, Modern Products, Ltd.*,
Aug 22 p 67
Pressure Losses in Pipe Fittings
Studied*, Oct 24 p 50
Pressure-Seal Valves, Crane Co.*,
Oct 10 p 78
Regulating, Leslie Co., Dec 12 p
83

83 Remote Control, J. A. Zurn Mfg. Co., Aug 22 p 67 Selector, Hydro-Aire, Inc.*, Dec 12 p 83 Sight Feed, Oil-Rite Corp.*, Dec 12 p 83

Van Der Willigen, P. C.: Contact Arcwelding*, Dec 12 p 58

Van Deventer, J. H.:
Antiquated Practices, Aug 1 p 41
Ask Uncle Joe—He Knows, Oct
24 p 41
Bathtubs Minus Jobs, Oct 3 p 33
The Big Boss, Sept 12 p 47
British Steel Labor Reports on
Russia, Aug 29 p 31
Choice of Weapons, Oct 10 p 53
The Consumer and Machinery,
July 18 p 47
The Flying Horse, Aug 8 p 47
For Sale—Golden Rule, Somewhat
Tarnished, Oct 31 p 33
Let's Release the Brakes (Reprint), Aug 22 p 43
Live Longer and Know Less, Sept
26 p 53
Pro Bono Publico, July 4 p 49
Rules of Unreason, Oct 17 p 45
Seek the Truth, July 25 p 37
Self Control or Police Patrol?
July 11 p 39
The Tail Chasing Cat, Aug 15
p 39
To Keep Them Flying, Sept 5 p

To Keep Them Flying, Sept 5 p

Two Kinds of Productivity, Sept 19 p. 39

Who Shall Plan, You or Uncle Sam? Nov 7 p 43

Van Dorn Iron Works Co.: Plastic Injection Press, Oct 3 p

Van Keuren Co.: Plug Gages and Thread Measur-ing Wires, Nov 7 p 70

Van Syckel, F. T.: Production of Ignition Radio Shields*, Aug 29 p 56

Vanadium: Justice Dept. Indicts Vanadium Companies, Charging Monopoly, July 18 p 152

Vanadium Alloys Steel Co.: New Tool Steel, Vasco Supreme, Features Improved Hot Hard-ness, Dec 12 p 63

Vanadium Corp. of America: Increases Alsifer Prices, Nov 14 Increases p 205

Vapofier Corp.: Gas Premixer*, Nov 21 p 75

Veterans Administration:

To Receive Surplus Hand Tools from WAA, Dec 26 p 102
Veterans Prefer Job Training in Mechanical and Metalworking Industries, Nov 7 p 113

Victory Engineering & Machine Works, Inc.: Seam Welder Fixture, Oct 24 p

Von Fuchs, G. H.: Protective Value of Industrial Lu-bricants*, Oct 3 p 46

Von Ludwig, Davidlee, and Funk, E. J., Jr.: A Critical Survey of Controlled Atmospheres, (3 Parts) Sept 19 p 42; Sept 26 p 74; Oct 3 p 50

Voyda, T.: X Ray Diffraction Studies of Electrodeposits, July 25 p 61

W

Waldes Kohinoor, Inc.: Retaining Ring, Oct 31 p 62

Wales:
Economy Will Be Integrated with
All of Britain, Cripps Says,
Nov 14 p 206

Wallen, G. J., Mfg. Co.: Wheel Dresser*, Aug 29 p 62

Walton Co.: Tap Extractors, Aug 29 p 61

Walz & Krenzer, Inc.:
Portable Thread Grinders, July 25
p 63

War Assets Administration: Acquisitions, Disposals and Inven-tories Through May, July 4 p

tories Inrough May, July 4 p
86
Adds New Export Divisions to
Office, July 11 p 96
Alcoa War Plant Sold to Reynolds Metals, Dec 19 p 123
Approved Dealers Appointed to
Sell Surplus Material, July 18
p 138
Asks New Proposals to Lease S.
Chicago Plant, July 18 p 160
Batteries for Sale, Nov 28 p 121
Bids Being Considered for Republic's S. Chicago Plant, Oct 17
p 143; Nov 21 p 84; Nov 28 p
107; Dec 12 p 109; Dec 26 p
115
Bids for Milwaukee Ordnance

Bids for Milwaukee Ordnance Plant Solicited, Sept 12 p 118 Big Inch Pipe Line Bidders Re-quired to Give More Complete Data, Oct 17 p 176 Boyd Appointed Deputy Admin-istrator of Disposal, Oct 17 p 106

106 CPA Amendment Cuts Buyer Searches Through Stocks, Nov

Searches Through Stocks, Nov 21 p 84 Coking Coal Mines for Sale, Oct 17 p 146 Committee for Disposal of Metal-working Machinery and Equip-ment Set Up, Sept 5 p 142

Corn State Bidders Buy Steel
Mats for Corn Crib Use, Nov
28 p 154
Creedon Resigns as General Disposal Deputy Administrator,
Oct 10 p 84
Disposal of Steel Plants and Facilities, Sept 19 p 107
Divided on Cutting Clayton Formula Prices on Machine Tools,
Sept 19 p 110
Establishes 23 New District
Offices, Sept 5 p 101
Fixed Price Register for Surpluses
to Be Used, Dec 5 p 98
Foreign Sales to Be Promoted,
Oct 17 p 78
Foundry Bids Solicited for Easton
and Baltimore Plants, Sept 19
p 151
General Gregory Speaks Plainly
on Disposal Progress, July 25
p 95
General Review Board Appoint-

General Gregory Speaks Plainly on Disposal Progress, July 25 95 General Review Board Appoint-ments, Sept 19 p 131 Group Set Up to Furnish Analy-sis and Advice, Sept 19 p 131 Has Removed All Threat of Non-payment of Commission Claims on Machine Tools, July 4 p 109

109
Heat-Treating Surplus Items Offered, Oct 17 p 82
Holds Old Prices, Nov 28 p 137
Impact of Machine Tool Price
Move 90 Days Off, Nov 7 p

Impact of Machine Tool Price
Move 90 Days Off, Nov 7 p
116
Initiates Multiple Tenancy for
Plants Too Large for Single
Units, Aug 22 p 82
Lead, Tin - Base Solder Surplus
Will Be Sold, Oct 10 p 170
Lease and Sale of War Plants
Announced, Sept 5 p 157
Lists Surplus Products Obtainable at Sales at Sites, Sept 19
p 108
Littlejohn Becomes New War Surplus Chief, July 25 p 153
Machine Tool Disposal Sped, Nov
7 p 76
Machine Tool Distributors Condemn WAA Actions; Ask for Reforms, Sept 26 p 111, 124
Machine Tool Pricing Policy
Draws Diverse Views, Oct 17 p
128; Oct 31 p 108
Machine Tools Trade Brisk in
Southern California, Dec 26 p
82
Machine Tools, 2800, on Sale in

A

B

R

War

R

U

B

Was

War

Was

Was

Was

F

R

Machine Tools, 2800, on Sale in Chicago, Dec 7 p 94 Magnesium Plant Offered for Sale or Lease, July 18 p 88; Oct 24

or Lease, July 18 p 88; Oct 24 p 114

Moving Slowly Toward Improved Disposal Program; Get Only 28 Pct Return, Nov 28 p 88

New Director for 15th Region, Sept 5 p 112

New Surplus Guide Book Issued, July 25 p 147

Offers Eight Major Plants for Disposal, July 4 p 154

Offers 813 Million at New York Site Sales, July 4 p 120

Oil Possibilities Lure Strange Bidders for Pacific Tube Co., July 25 p 78

ders for Pacific Tube Co., July 25 p 78
Pacific Tube Co. Buys Plant at Los Angeles, Nov 21 p 88, 119
Plans to Sell 75 Pct of Surplus by Jan. 31, Oct 31 p 96
Plants for Sale or Lease, Oct 10 p 88, 144; Nov 7 p 155; Nov 21 p 116, 152; Nov 28 p 154; Dec 5 p 118; Dec 12 p 96; Dec 26 p 102, 104
Price Policy Revised in Sale of Sal

Price Policy Revised in Sale of Nonferrous Metals, Nov 28 p

Priority Claimants May Have Shorter Time to Buy at Site Sales, Oct 24 p 100 Removal of Pressure Pipe From Army Camps Being Tested, Sept 26 p 94 Sales Planning Division Set Up to Speed Surplus Sales, Oct 10 p 166

Scrap Iron & Metal Dealers Advisory Committee Formed, July 4 p 163

visory Committee Formed, July 4 p 163 Sells Two Plants in New York, July 4 p 156 Slow at Moving Surplus Despite Increase in Personnel, Sept 26 p 88 Small Business Aided in Acquisi-tion of Surplus Real Property, July 11 p 80 "Small Business" Defined, Oct 31 p 98

Dis-

Fa-

trict

uses

oted,

ston t 19

ainly y 25

ointnaly-

Non-laims 4 p

Of-

Price 7 p

y for single

irplus 0 Plants

btain-pt 19

r Sur-

, Nov

Con-sk for 124

risk in 26 p

Sale in

or Sale Oct 24

proved Only 28

Region,

Issued,

its for

v York

ge Bid-

lant at

88, 119 Surplus

Oct 10 5; Nov p 154; p 96;

y Have

Tested,

Set Up Oct 10

ilers Ad-

w York, Despite Sept 26

Acquisi-Property,

d, Oct 31

Speeds Up Disposal of War Surplus, Oct 10 p 109
Steel and Pig Iron Costing \$23
Million Sold for More Than \$15½ Million, July 4 p 86
Steel Offering Brings Out Hungry Buyers, July 4 p 90
Surplus Buyers to Be Aided by "One-Stop" Service, Nov 21 p 121

"One-Stop" Service, Nov 21 p
121
Surplus Disposal Faults Highlighted by O'Mahoney, Oct 3 p
104, 117
Surplus Disposal Policies Outlined, July 25 p
149
Surplus Plant Sales at Snail's
Pace in New England Area,
July 18 p
134
Surplus Program to Help Scrap
Shortage, Aug 22 p
108
Surplus Property Now on Sale
Worth Billion Dollars, Dec 26

p 114
Surplus War Properties List Announced, Dec 19 p 88
Usable Steel Group Asks 50-Pct Allotment to Steel Warehouses, Dec 19 p 120
Veterans Administration to Receive Surplus Hand Tools, Dec 26 p 102
Zone Administrators Named, Aug 29 p 133

War Contracts: Navy Reports Minute Loss in Granting War Loans, Oct 3 p

War Dept.:

AAF Studying Weapons Said to
Dwarf Atomic Bomb, Sept 19
p 126
Army Board Created to Study
Measures for U. S. Civilian Defense, Dec 12 p 92
Budget Asks \$14,580,000 for Industrial Mobilization, Aug 1 p 76
Outlines Program on Rail Equipment, Nov 7 p 153
Research Activities of German Scientists in America Revealed*,
Dec 12 p 116B
Research and Development Division Created at Top General
Staff Level*, Oct 3 p 95
Status of Atomic Power Development Revealed*, Dec 12 p 137
To Set Up Strategic Machine
Tool Reserve, Oct 24 p 112
War Production:

War Production:
Du Pont Ranks Highest on War
Facility List, CPA Reports,
Nov 7 p 136

War Production Board: Struggle Between WPB and Mili-tary Revealed in Nelson's Book, Sept 12 p 145

Warehousing:
Distributors to Hold Price Line,
July 11 p 96
Freight Charges on Steel Shipments Clarified, Aug 8 p 104A
Resellers of Alloy Steel Items
Given Price Advance, Aug 22 p
112

Usable Steel Group Asks 50-Pct Allotment to Steel Warehouses, Dec 19 p 120

Warner & Swasey Co.: Automatic Bar Machines*, July 4 P 80
Builds Earth Mover, Sept 12 p
111; "Nov 7 p 53

Warren, Dwight C.: New England Manager of THE IRON AGE Diese, Aug 8 p

Wartime Research in Metalworking Materials and Processes, (Reports) Aug 22 p 66

Wartime Technical Developments, German: Reports, Aug 29 p 39; Sept 26 p 80; Oct 10 p 67; Nov 14 p

Washbond, H. H., and Wilkinson, O. F.: Flame Cutting and Welding in Bulldozer Manufacture*, Sept 12 p 56

Washington Glass Laboratory & Instrument Co.:
Temperature Regulator, Oct 17 p

Waterbury Farrel Foundry & Ma-chine Co.: Giant Nut Former*, Dec 19 p 80

Watson-Stillman Co.: Semiautomatic Molding Machine⁸, Oct 3 p 56 Single-Action Press⁸, Oct 3 p 55

Waverly Petroleum Products Co.: Bright Dip Formulas, Sept 19 p 67

Wayne Engineering Research Insti-tute: Research Service Set Up for Smaller Plants in Detroit Area, Aug 15 p 72

Weaver, S. H.: Effect of Temperature on Carbon-Moly Steel, Aug 22 p 63

Webber, H. M., and Hotchkins, A. G.: New Heat Treating Atmosphere Producer*, Nov 21 p 48

Webster, R. A.: Hardness Gages*, Dec 19 p 84

Welding:
Automatic Welding in Steel Plant
Maintenance, Oct 10 p 76
Extruded Powder Metal Rods*,
Dec 19 p 68
Failures Laid by Charlton to Improper Design, Nov 7 p 140
Flame Cutting and Welding in
Bulldozer Manufacture*, Sept
12 p 56
Goggle, American Optical Co.,
Oct 24 p 68
Hammer Welding Precious Metals*, Aug 22 p 59
How to Weld Aluminum, (Parts
3, 4) July 4 p 67: July 11 p 53
Jet Engine Pard*, Sept 5 p 46
Metallurgical Aspects Stressed by
Engineers at Annual Meeting*,
Nov 28 p 59
Pressure Welding Thin Aluminum
Parts*, Aug 8 p 56
Reflectoscope for Prewelding Inspection*, Sept 12 p 64
Rod Casting Machine*, Nov 21 p
55
Safety Booth, Hobart Bros. Co.*,

Soft Casting Machine*, Nov 21 p

Safety Booth, Hobart Bros. Co.*,
Oct 24 p 68
Shielded Clamp, Mechanics Engineering Co., Oct 24 p 68
Spatter-Proofing Compound, G. W.
Smith & Sons, Oct 24 p 68
Stabilized 18-8 Stainless Steel*,
July 11 p 60
Tack Welds Prevent Distortion*,
Aug 1 p 57
Weldability of High Strength
Wrought Aluminum Alloys, Nov
28 p 62

Welding, Arc:
Coated Electrode Developed for
Automatic Welding*, Dec 5 p

Contact Arcwelding*, Dec 12 p 58
Converting Surplus Presses by
Arcwelding*, Sept 26 p 65
Defense of Welding, Sept 26 p
104; Oct 17 p 96
Electrode Holder, Tong Type,
Tweco Products Co.*, Oct 24 p
68

68
Electrode Holders, Tweco Products Co., Oct 24 p 68
Farm Welder, Hobart Bros. Co.*,
Oct 24 p 66
Gantry Aids Tank Production by
Lincolnweld Process*, Sept 12 p
70

Lincolnweld Process*, Sept 12 p
70
Home and Farm Welder, General
Electric Co.*, Oct 24 p 66
Inert-Arc Welding for Aluminum,
Magnesium and Stainless*, Oct
31 p 57
Multioperational Machine, Clinton
Machine Co.*, Oct 24 p 66
Railway Welder, Hobart Bros.
Co.*, Oct 24 p 65
Stainless Steel Cutting With the
Electric Arc*, Nov 14 p 96
Structural Shapes Produced by
Welding*, Oct 17 p 62
Surplus Units Placed on Sale,
Sept 19 p 99
Tool Steel, Nov 28 p 59
Twin-Unit Welder, General Electric Co.*, Oct 24 p 66
Welding, Gas:

Welding, Gas:
Air-Acetylene Tips, Acet-A-Tip
Co.*, Oct 24 p 67
Pressure Welding of Alloy Steel
Tubing, Nov 28 p 61

Tailer-Made Boiler Tubing by Pressure Welding*, Aug 15 p

Welding, Resistance:

luminum Cleaning Procedures; Effect on Spot Welding, Dec 19 p 76

p 76 Automatic Spot Welder Embodies New Principle*, Nov 28 p 67 Battery Powered Aluminum Flash Welder*, Dec 26 p 51 Bench Type Spot Welder, Thom-son Electric Welder Co.*, Oct 24 p 65

Bench Type Spot Welder, Thomson Electric Welder Co.*, Oct 24 p 65
Combination Welder Control, Square D Co.*, Oct 24 p 67
Design for Resistance Welding, Nov 28 p 61
Eight Metals Welded in One Ring*, Nov 7 p 66
Electrode Dressing Tool, Edward T. Klee*, Oct 24 p 68
Flash Welding Steel Wire, Nov 28 p 62
Giant Spot Welder, Sciaky Bros., Inc.*, Oct 24 p 65
Multiple Spot Welder for Railroad Cars*, Sept 5 p 49
Seam and Flash Welding Aluminum*, July 11 p 53
Seam Welder Fixture, Victory Engineering & Machine Works, Inc., Oct 24 p 65
Seam Welding Stainless Steel
Foil*, Dec 5 p 76
Spot Welding Aluminum*, July 4 p 67
Spring Steel to Low Carbon Steel, Nov 28 p 62

p 67 Spring Steel to Low Carbon Steel, Nov 28 p 62 Storage Battery Welding, July 4 p 70

Welding, Spot: (See Welding, Resistance)

Welding Jet Engine Parts, by W. J. Campbell*, Sept 5 p 46

Welding Precious Metals, by F. W. Meyers, Jr.*, Aug 22 p 59

Welding Stabilized 18-8 Stainless, by R. J. Hafsten*, July 11 p 60

Wellauer, E. J.: Hardenability Test for Quenched and Tempered Steel*, Sept 5 p

Wendt-Sonis Co.: Carbide Cutters*, Dec 26 p 71

Western Metal Congress and Ex-position: Eleven to Serve on General Com-mittee, Nov 14 p 158 Top Rank Scientists to Speak at March Meeting, Nov 28 p 147

Westinghouse Electric Corp.:
All-Steel Electric Motor With
New Design*, Sept 26 p 120
Apparatus for Accurately Setting
Trammel Points*, Aug 1 p 49
Believes Decentralization Will
Combat Rising Costs, Nov 7 p
105
Builds No. 26

Combat Rising Costs, Nov 7 p
105
Builds New Midwestern Plant,
July 18 p 163
Dissociation Pressures of Metal
Oxides, Sept 26 p 61
Electric Catapult Built for Navy
Planes, Sept 12 p 140
Electrical Appliance Output Making Rapid Gains, July 4 p 136
Giant Electric Motors Will Be
Built, Dec 12 p 136B
Hydro-Bomb, a New Rocket Weapon to Be Used Under Water,
Revealed, Aug 22 p 146
Lucite Models Solve Bearing
Problems°, Aug 22 p 55
Management Must Have Right to
Manage, Says Price, Aug 1 p
149
Reports Substantial Gains in Ac-

Reports Substantial Gains in Appliance Production, July 18 p

eket Radio With Moon-to-Earth Broadcasts Possible, Sept 19 p

Broadcasts Possible, Sept 19 p 148
Sends Nine to Nuclear Institute, Aug 8 p 132
Tapping Quadruple Acme Threads*, July 25 p 57
Third Quarter Output, Nov 28 p 155

To Aid Development Program of the Army and Navy, Aug 1 p

Transformers*, Oct 31 p 61 White Collar Union Asks 16-Pct Cost of Living Bonus, Dec 19 p 125

Weston Electrical Instrument Corp.: Electronic Analyzer*, Aug 15 p

Whelco Instruments Co.:
Pyrometer Controller, Oct 17 p
72

White Engineering & Mfg. Co.: Vapor Steam Cleaner*, Sept 19 p

Whitson, Lee S.:
Setting Up for a New Product*,
Nov 7 p 58

Wickes Brothers: Lathe, Crankpin*, July 11 p 65 Lathe, Crankshait*, July 4 p 79

Wickman Corp.: Abrasive Wheels, Sept 5 p 68 Bench Type Grinding and Lapping Machine⁸, Nov 28 p 79

Wilcox, R. J.:
Induction Furnace Melting as Applied to the Manufacture of High Alloy Casting, Dec 19 p

Wilkinson, O. F., and Washbond, H. H.: Flame Cutting and Welding in Bulldozer Manufacture*, Sept 12 p 56

Willey's Carbide Tool Co.: Carbide Drills, Dec 26 p 72

Williams, R. D., and Bennett, R. W.: Flash Welding Steel Wire. Nov 28 p 62

Williams, R. D., and Zambrow, Pressure Gas Welding of Alloy Steel Tubing, Nov 28 p 61

Willink, Arthur: Welding Spring Steel, Nov 28 p

Willsonn Computers: Orifice Computer*, Oct 10 p 80

Willys-Overland Motors, Inc.:
Jeep and Station Wagon Production, Oct 10 p 84
Lightweight, Low Cost Car Introduced*, Oct 10 p 82
Starts Delivery of Jeep Station
Wagon, Aug 1 p 74

Wilson, K. R.:

Blanking and Forming Press*,

Oct 3 p 55

Wilson Mechanical Instrument Co., Inc.: Universal Testing Unit*, Dec 19 p 82

Winchester Co.: Multiple Contact Connector*, Aug 1 p 68

1 p 68

Wire:

Aluminum Wire Prices Up, Aug
13 p 114

Anaconda at Sycamore, Ill., Sold
to Diamond Wire & Cable Co.,
Sept 26 p 126

Appliance Wire, General Electric
Co., Aug 1 p 70

Channeling Copper Wire Bars to
Wire Manufacturers Asked of
CPA, July 4 p 110

CPA Extends Bale Tie Wire,
Sept 26 p 94

Fine Steel Wires to Aid HeavyDuty Tire Users Get More
Miles, Nov 14 p 104

Flash Welding Steel Wire, Nov
28 p 62

Price Increased, Aug 29 p 100

Flash Welding Steel 11.2
28 p 62
Price Increased, Aug 29 p 100
Surplus Bale Wire Must Go to
Tie Makers, Aug 8 p 110
Swollen Demand Rather Than
Scarcity Affects Wire Items,
Says Louis, July 4 p 111
Wire Forms and Stampings Make
Good Partners*, Oct 17 p 48

Wire Forms and Stampings Make Good Partners, by Herbert Chase*, Oct 17 p 48

Woldman, Norman E.: Selecting Nonferrous Bearing Material*, (2 Parts) Sept 5 p 54; Sept 12 p 60

Wolfe, K. J. B.: Improving Cutting Properties of High-Speed Steel, Aug 15 p 63

Woodworth, N. A., Co.: Fixture Clamp*, Aug 29 p 60 Miniature Jigs, Aug 29 p 59 Thread Ring Gage*, July 25 p 65

Work Incentives:

Cost Reducing Program for a
Job Shop*, Sept 26 p 56
Incentive Pay and Uniform Wage
Pattern Involved in New
Strikes, July 11 p 70
Plans for Grinding Departments*,
Nov 7 p 66

Wright, Wilson A.:
Promoted at Republic Steel, Nov
7 p 115

Wyche, Ernest H.: Behavior of 18-8 Ti-Stabilized Stainless*, (2 Parts) Aug 8 p 61; Aug 15 p 54

Wyer, R. F.: Inert-Arc Welding*, Oct 31 p 57

Wyzenbeek & Staff, Inc.: High-Speed Grinder*, Nov 7 p 68 Hole Cutters*, Dec 26 p 70

X

X Ray:
Babcock & Wilcox Buys 2,000,000-Volt X Ray, Aug 29 p 99
Case for 100 Pct X Ray Inspection of Aircraft Castings*, Oct
10 p 56

Diffraction as an Analytical Tool*, Sept 19 p 55 German Industrial Radiographic Inspection Standards, Sept 19 p

Photometer, General Electric Co., Oct 17 p 74 20-Million Volt Betatron for In-dustrial Radiography*, Nov 21 p 60 X Ray Diffraction Studies of Elec-trodeposits, July 25 p 61

X Ray Diffraction as an Analytical Tool*, by David Goodman, Sept 19 p 55

Yale & Towne Mfg. Co.: Two-Ton Electric Hoist*, Aug 8 p 75

Yardeny Laboratories, Inc.: Remote Control*, Aug 1 p 68

Young Arbor Co.: Precision Mandrel*, Aug 29 p 61

Youngstown Sheet & Tube Co.:
Earnings, Third Quarter, Oct 31
p 97
Gets Pipeline Contract, July 18 p
105
Mahoning Valley Residents Tour
Plants*, Nov 7 p 101

New Ore Bridges Near Comple-tion at Ohio Plant*, Aug 29 p 97

Objects to NLRB Mine Election, Aug 15 p 106

Yugoslavia: Industrial Pact Signed Czechs, Nov 14 p 184 With

Z

Zagar Tool, Inc.:
Collet Fixture*, Dec 26 p 70
Drillheads*, Aug 29 p 59
Drilling Closely Spaced Multiple
Holes*, Dec 5 p 71

Zambrow, J. L., and Williams, R. D.: Pressure Gas Welding of Alloy Steel Tubing, Nov 28 p 61

Zernickow, O., Co.: Hand Tachometer*, Sept 5 p 70

Zimmerman, Rufus E.: Receives ASM Award, Aug 22 p 148

Zinc:
Allocation from Government Stockpiles Approved by CPA on Limited Basis, Aug 29 p 108
American Quebec Zinc Refiners,
Ltd., Plan Refinery at Arvida,
Que., Dec 19 p 128

Britain Raises Price, Nov 28 p 9
Canada's Output, June, Sept 12
122; August, Nov 7 p 118
Consumers Have Difficulty Meeting Their Requirements
Grades, July 25 p 112
Gain in Receipts Depends of OMR Action, Oct 24 p 114
Government Stockpile, 222,27 ShotTons, Aug 8 p 118
New Mines Subsidized, Aug 22
116
Polarographic Analysis in Alumnum Alloys*, Oct 3 p 36
Price Increase in Primary an Scrap, Oct 17 p 130
Price Increase Question Give Over by OPA to Higher Anthority, Oct 3 p 106
Prices, Nov 7 p 118; Nov 14
146; Nov 21 p 124; Dec 26; 118
Production Fell 3 Pet During May Aug 1 p 154
Quarterly Publication Begun, Oc

Production Fell 3 Pet During May Aug 1 p 154 Quarterly Publication Begun, Oc 31 p 110 Release by U. S. to Meet Urgen Needs, Oct 31 p 110 Stockpile in July, Sept 12 p 12 Stocks Unbalanced; Price Rumored, Sept 26 p 126 Subsidies Increased, Sept 19 p 11 Supply Low, Sept 19 p 93

Zurn, J. A., Mfg. Co.: Remote Valve Control, Aug 22 Solids Interceptor*, Oct 10 p 78

